DOCUMENT RESUME

ED 095 414 CE 001 981

AUTHOR	Sappenfield, Robert W.; And Others
TITLE	Report of the Louisiana Statewide Planning for Physician Residency Program Committee.
INSTITUTION	Louisiana Regional Medical Program, Baton Rouge.; Louisiana State Office of Comprehensive Health Planning, Baton Rouge.
SPONS AGENCY	National Institutes of Health (DHEW), Bethesda, Md. Bureau of Health Manpower Education.
NOTE	132p.
EDRS PRICE	MF-$0.75 HC-$6.60 PLUS POSTAGE
DESCRIPTORS	Data Analysis; Demography; *Health Needs; Manpower Development; Models; Occupational Surveys; *Personnel Needs; *Physicians; *State Surveys; *Statewide Planning; Tables (Data)
IDENTIFIERS	*Louisiana

ABSTRACT

Preceding the body of the report, a brief review of the literature is provided to acquaint the reader with similarities and differences between national and local trends regarding the demographic characteristics of the physician population. The goal of the statewide residency study was to develop a strategy for the design and allocation of physician residencies consistent with statewide needs. A graphic model of the physician manpower production process was developed which enhanced understanding of the manpower problems facing Louisiana. Through the model, available data, and personal interviews with senior medical students and postgraduate trainees, data were compiled and analyzed regarding the need for physicians in Louisiana in 1982, where and how the number of physicians can be increased, the status of primary care treatment, likely sites for practicing physicians, and related concerns. The general conclusions point to several significant manpower production problems in Louisiana in its preparation for future needs for physician services. The study committee proposed several recommendations to meet the problem. (Appendixes contain supplementary tables and interview forms.) (AG)

LOUISIANA REGIONAL MEDICAL PROGRAM
and
BUREAU OF HEALTH MANPOWER EDUCATION

Contract No. NIH 72-4340

REPORT OF THE LOUISIANA STATEWIDE PLANNING FOR PHYSICIAN RESIDENCY PROGRAM COMMITTEE

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Prepared by:

Robert W. Sappenfield, M.D.
Michael H. Moskowitz, M.P.H.
Pamela S. Allison, B.A.
Yogesh C. Patel, Ph.D.

IN COOPERATION WITH
THE LOUISIANA OFFICE OF COMPREHENSIVE HEALTH PLANNING

CE 001 981

ACKNOWLEDGEMENT

Special Acknowledgement for their assistance in the preparation of this report must go to J. A. Sabatier, Jr., M.D., Director, Louisiana Regional Medical Program, Beverly Barid, M.S.W., Louisiana Regional Medical Program, Jerianne Heimindinger, B.A., Louisiana Regional Medical Program, Jack Edwards, B.A., State Office of Comprehensive Health Planning, Ronald Preston, M.S.W., State Office of Comprehensive Health Planning, Glenn Chustz, B.S., State Office of Comprehensive Health Planning, James Haug, Department of Survey Research, A.M.A., Gene Roback Department of Survey Research, A.M.A., Jo Reed, Jeannie, L. Moore, Sylvia Minor, M.S.W., Louisiana Regional Medical Program, Sherryl McCutchen, Faye Serpas, Louisiana Regional Medical Program.

TABLE OF CONTENTS

Page

Acknowledgement.. i

Overview.. 1

Brief Review of Literature.. 3

Background.. 8

Results and Interpretation of Planning Process

Physician Manpower Production Process.. 12

Presently Available Data.. 15

Data From the AMA Tapes.. 31

Data From Interviews.. 48

Discussion.. 82

Summary and Recommendations.. 87

LIST OF TABLES

Table Number	Title	Page Number
1	Various Estimates of Physician Needs in Louisiana 1982	16
2	Five Examples Illustrating Quantitative Aspects of the Physician Manpower Production Process	18
3	Comparison of Some Physician Specialist/ Population Ratios for Louisiana and the United States in 1970 and for Prepayment Group Practice	23
4	Physician Needs by Specialty in La. for 1980-82 Based on 4,000,000 Population	24
5	Active Nonfederal Physicians in La. 1970 (interns and residents excluded)	25
6	Comparison of the Present Distribution of Final Year Resident Positions of Various Medical Specialties with Certain Distributions Projected for 1982	27
7	The Journal of the American Medical Association (JAMA) Education Number	29
8	Distribution of Non-Federal Physicians* Graduated from Louisiana State Institutions by Year of Graduation - December 31, 1972	32
9	Distribution of Non-Federal Physicians Graduated from Louisiana State Institutions by Year of Graduation and Practice State - December 31, 1972*	33
10	Distribution of Non-Federal Physicians in Louisiana by State of Graduation, Employment Sector and Year of Graduation--December 31,1972*	34

LIST OF TABLES

Table Number	Title	Page Number
11	Distribution of Non-Federal Physicians* Graduated from Louisiana State Institutions by State of Practice and Professional Activity - December 31, 1972	36
12	Distribution of Non-Federal Physicians* in Louisiana, by State of Graduation and Major Professional Activity - December 31,1972	37
13	Distribution of Non-Federal Physicians Graduated from Louisiana State Institutions by Primary Specialty and State of Practice - December 31, 1972*	39
14	Distribution of Non-Federal Louisiana Physicians by Primary Specialty December 31, 1972*	42
15	Distribution of Non-Federal Physicians in Louisiana by Major Specialty Group State of Graduation and Year of Graduation - December 31, 1972	44
16	Distribution of Non-Federal Physicians Graduated from Louisiana State Institutions by Major Specialty Group, State of Practice and Year of Graduation - December 31, 1972	46
17	Future Training Location of Senior Medical Students by Medical School	49
18	Future Practice Location of Senior Medical Students by Training Location and by Medical School	51
19	Influence of Medical Schools in Decisions of Senior Medical Students Regarding General Practice in Areas of Family Practice, Pediatrics and Internal Medicine by Future Specialty	53

LIST OF TABLES

Table Number	Title	Page Number
20	Future Practice Location of Senior Medical Students by Training Location and by Specialty	54
21	Factors Influencing the Decision of Future Training Location for Senior Medical Students, by Medical School	56
22	Ranked Factors which Influenced the Decision of Senior Medical Students on Training Location, by Training Location	57
23	Factors Influencing the Decision of Future Practice Location for Senior Medical Students by Future Practice Location and Medical School Attended	59
24	Ranked Factors Influencing Practice Location of Senior Medical Students by Practice Location	61
25	Type of Practice Preferred by Senior Medical Students, Interns, 1st Year Residents, Final Year Residents, and Family Practice Residents	63
26	Desired Community Size for Future Practice by Senior Medical Students, Interns, First Year Residents, and Final Year Residents	64
27	Future Practice Location by First Year Residents, Final Year Residents, and by Specialty	66
28	Future Practice Location by Interns and Family Practice Residents	67
29	Factors Influencing the Decision of Post-graduate Medical Training Location by Interns, First Year Residents, Final Year Residents, Family Practice Residents & by Medical Specialty where Applicable	69

LIST OF TABLES

Table Number	Title	Page Number
30	Ranked Factors Influencing Training Location by Interns, First Year Residents and Final Year Residents	70
31	Perceived Strengths of Postgraduate Medical Training Programs in Louisiana by Interns, First Year Residents, Final Year Residents, Family Practice Residents, and by Medical Specialty where Applicable	72
32	Perceived Weaknesses of Postgraduate Medical Training Programs in Louisiana by Interns, First Year Residents, Final Year Residents, Family Practice Residents, and by Medical Specialty where Applicable	73
33	Factors Influencing the Decision of Future Practice Location by Senior Medical Students, Interns, First Year Residents, Final Year Residents, Family Practice Residents, and by Future Practice Location	75
34	Ranked Factors Influencing Practice Locations of all Postgraduate Trainees by Practice Location	76
35	Ranked Factors Influencing Practice Location by Interns, First Year Residents and Final Year Residents	79

OVERVIEW

The section of this report entitled "Overview" is a basic discussion of why the Statewide Planning for Physician Residency Programs Committee was formed and what action the Committee has taken. The Committee was established on March 29, 1972. A meeting was called and all agencies involved in residency training programs in Louisiana were asked to attend. As a result, a permanent committee was established.* CHP and RMP agreed to provide staff for the Committee and by mutual agreement it became a subcommittee of both the CHP and RMP Manpower Committees.

At the May, 1972 meeting the staff discussed the future of physician problems in Louisiana such as physician shortages, specialty and geographic maldistribution, certification of postgraduate education, and the need for long range planning in these areas. Action items authorized by the Committee included a search for funds which resulted in the contract awarded to the Regional Medical Program by the Bureau of Health Manpower Education for the sum of $15,918; an in-depth review of presently existing physician manpower information in Louisiana; and the search for and development of new and more complete information to serve as the basis for future Committee recommendations.

At the December, 1972 meeting the methodology for completing the scope of work section of the BHME contract was described and adopted by the Committee. The Committee was kept aware of problems encountered by the staff in gathering certain data for analysis.

---

* For membership see Appendix

In April, 1973, the Committee reaffirmed its permanent role and pledged to continue studying and developing solutions to Louisiana's residency training problems. It is the stated intent of the Committee to use the information supplied to them by the staff as it becomes available to plan for the future needs of Louisiana's physician manpower pool.

BRIEF REVIEW OF THE LITERATURE

It is not the purpose of this report to develop a lengthy review of the literature regarding the demographic characteristics of the physician population in the United States. This has previously been accomplished by groups more interested in national trends. The purpose of this literature review is to acquaint the reader with similarities and differences between national and local trends. Caution should be used, however, in giving too much significance to the material discussed in the literature review for two major reasons. First, a good deal of the conclusions drawn from studies dedicated to physician demography conflict. This is often due to varying and questionable methodoligies used in the studies to reach the conclusions. Second, Louisiana is the only state in the United States with a dual health care system, separating the indigent from the general population. This often makes it difficult to apply nationally developed data for statewide planning purposes.

A great deal of the present literature, as well as earlier literature, deals with the development of "ideal" physician to population ratios and recommendations regarding increased medical school enrollment to reach these ratios. Wilson (1) examined the various reports and commissions making such recommendations. Examples include the 1956 Bayne-Jones Report, the 1959 Bane Report, the 1968 National Institutes of Health (NIH) Study, the Howard Report of the Association of American Medical Colleges (AAMC), and the Carnegie Commission's "Higher Education and the Nation's Health."

The historical Bayne-Jones and Bane reports recommended increases in the number of medical school and osteopathic school graduates as well as increases in the number of medical schools. The projected figures for medical graduates for both reports were met either on or before schedule. Deficiencies still remain.

The NIH Study, the AAMC Study, and the Carnegie Commission Report all recommended increases in the number of medical school graduates that would account for an increase of 50,000 practicing physicians by the early 1980's.

There are severe problems with all of the projected figures of future physician needs. Most are developed either to maintain present ratios or reach some "ideal" ratio. The problem is that neither of these methods is precise. Another problem regarding physician projections often cited in the literature is that the projections do not account for the end result of rapidly expending medical school enrollment and development, i.e., a market glutted with expensively trained physicians, unable to find employment. Credence has been lent to this argument through similar situations in other professions.

Another large section of the literature deals with physician distribution on a national basis. This is of little interest to this study, other than to mention increased migration of physicians to the far west and northeast urban centers. A general trend of physician migration to large metropolitan areas throughout the United States is noted as well.

A sizable group of studies has been developed concerning factors which attract physicians to practice location. These studies examine variables such as number of hospital beds, number and quality of internship and residency programs, number of medical schools in cities, economic and educational levels of different states, and population growth. Scheffler (2) stated that the greatest correlation existed between the number of high quality internship and residency programs and the number of medical and surgical specialists attracted to practice in a state. Another high correlation existed between the number of hospital beds and the number of physicians. Scheffler found a low correlation to exist between state of medical school education and state of internship and residency. Parker et al (3) discovered that states with the highest education levels gained the most physicians. Parker also discovered that population growth was highly correlated with growth of the physician manpower pool.

The question raised with all of these location of practice determinations is whether they are examining the real factors or the manifestations of the underlying reasons that determine physician location. Another problem with these studies is that few surveyed the physician populations being studied to directly ask questions concerning factors influencing practice location.

Parker did use the survey method to determine when a group of physicians in the eleven counties comprising the Rochester Regional Hospital Council decided to practice in their present locations. It was found that the greatest percentage decided during internship and residency. In addition, Parker found that physicians in both large and small communities agreed that physicians were deterred from small community practice for the reasons of personal preference towards urban living, lack of adequate facilities in small communities, influence of spouse, too large a work load and too little time off in small communities, lack of specialty support services in small communities and lack of cultural events and entertainment in small communities.

Another interesting trend illustrated by Scheffler (2) is the decrease exhibited nationally of physicians practicing in their state of medical school graduation from 44.2% in 1963 to 43% in 1967. Although this decrease does not look particularly significant when first examined, it can be seen that if the 16,534 new physicians who entered practice between 1963 and 1967 accounted for this change, then only 25.3% were practicing in their states of medical school graduation.

A continuing review of the literature is planned as further progress is made in our own investigations. The information would then be coordinated to give the committee a clearer understanding of the physician manpower production process and its effects as they relate to Louisiana.

REFERENCES

Wilson, Marjorie P., "Medical Schools in the Planning Stage: Are More Needed?", Journal of Medical Education, Vol. 47, No. 9, September 1972, pp. 677-689.

Scheffler, R.M., Ph.D., "The Relationship Between Medical Education and the Statewide Per Capita Distribution of Physicians," Journal of Medical Education, Vol. 46, November 1971, pp. 995-998.

Parker, Ralph C., Jr., M.D. and Thomas G. Tuxill, R.S., "The Attitudes of Physicians Towards Small Community Practice," University of Rochester School of Medicine and Dentistry, Rochester, N.Y., Journal of Medical Education, Vol. 42, April 1967, pp. 327-344.

Steinwald, Carolyn, "Factors Influencing the Distribution and Location of Physicians: Literature Review," Distribution of Physicians in the U.S., 1971, Chicago, The American Medical Association, 1972, pp. 25-31.

Lee Edgar, M.D., Charles Jeffry, M.P.H., Marion Broder, M.A., Michal Berkus, A.M., Paul Jones, Ph.D. and Robin Lake, Ph.D., Physician Demography in Ohio - 1971, Ohio Board of Regents, 1972.

Schonfeld, Hyman, Jean Heston and Isidore S. Falk, "Numbers of Physicians Required for Primary Medical Care," The New England Journal of Medicine, Vol. 286, No. 11, March 16, 1972, pp. 571-576.

Boulton, Donald A., Ed. and Davis G. Johnson, Ph.D., "Follow-up Study of Medical School Alumni," Journal of Medical Education, Vol. 45, June 1970, pp. 442-446.

Mason, Henry, "Manpower Needs by Specialty," Journal of the American Medical Association, Vol. 219, No. 12, December 11, 1972, pp. 1621-1626.

Steinwald, Carolyn, "A Critique of Manpower Needs by Specialty." Journal of the American Medical Association, Vol. 221, No. 11, December 11, 1972, pp. 1411-1412.

Fahs, Ivan J., Ph.D., Katheryn Ingalls, B.S., and Winston R. Miller, M.D., "Physician Migration, A Problem of the Upper Midwest," Northlands Regional Medical Program, Journal of Medical Education, Vol. 43, June 1968, pp. 735-740

A Report on Physician Manpower and Medical Education, Council on Medical Education and Council on Health Manpower, American Medical Association, Chicago, June 1971.

BACKGROUND

The overall goal of the statewide residency study was to develop, in collaboration with the primary interested parties in Louisiana, a strategy for the design and allocation of physician residencies consistent with statewide needs. The objectives used to achieve this goal were as follows:

1. To describe the physician manpower production system that presently exists in Louisiana.
2. To examine the effectiveness of the present manpower production system.
3. To preduct future needs of Louisiana for physician manpower through 1982.
4. To list different methods to alter the physician production system to meet the present and future needs of Louisiana.

The methodology used in the planning process consisted of the development of a graphic model of the physician manpower production process, the use of presently available data to project future needs and to illustrate the use of the model mentioned above, the use of new sources of data in the form of AMA-developed computer tapes and personal interviews with senior medical students and postgraduate trainees, and consideration by the Committee of alternative actions to remedy deficiencies uncovered.

A schematic diagram entitled "The Graphic Outline of Physician Manpower Production Process" was developed. It is principally based on the concept of the "resident graduate" as the finishing product of the system, ready to enter a lifetime of practice in his area of competence. The important aspects of the production process are outlined including all losses and all gains for Louisiana. The major patterns followed by physician trainees are illustrated.

The use of this graphic model to enhance our understanding of the manpower problems that face Louisiana and possible objectives to be achieved were illustrated by the following activities. Prediction of future physician need in Louisiana was based on present and various adjusted physician-to-population ratios. Present estimates and possible alternative quantities were assigned to the various inputs and outputs of the model. Various methods of achieving the number of physicians needed for Louisiana to equal the U.S. physician-to-population ratio by 1982 were illustrated. Next, the present distribution of physicians in Louisiana by specialty, the estimated number of specialists needed in 1982, and the distribution of final year residency positions in Louisiana by medical specialty were compared. The number of residency positions offered in Louisiana by specialty and the number of foreign medical graduates filling residency positions were considered in interpreting the data on hand. The use of the model also made evident the need for more specific information concerning different aspects of the physician manpower production process as related to Louisiana and its future needs.

The AMA was contacted by the Committee Chairman, Dr. Robert Sappenfield, Louisiana State University Medical School in New Orleans, and Dr. Joseph A. Sabatier of Louisiana Regional Medical Program. Mr. Jim Haug, with the AMA's Statistics Division at that time, came to Louisiana as a consultant to the staff regarding the information available in the AMA tapes.* The staff requested that three tapes be sent to aid with the residency study. The first was a tape of practicing physicians in Louisiana, the second was a tape of all graduates of Louisiana medical schools, and the third was a tape of all residents and interns trained in Louisiana. The third tape has not yet been received. It is hoped that the information in the tapes will aid in the refinement of the rough data that was gathered and delivered to the Committee in the early meetings.

It was felt by both the staff and the committee that a residency study would have little value if the opinions of those who were presently going through the process were not examined. This was especially true in terms of giving consideration to possible reasons for the decisions made by trainees as they progress through the manpower production process. Interview forms were developed for senior medical students, interns, first year residents, and final year residents.* All of the forms contained comparable questions from which parallel data could be collected and developed into tabular form.

Senior medical student interviews were conducted from a one-fourth sample each of LSU Medical School in New Orleans and Tulane Medical School and a 100% sample from LSU Medical School in Shreveport. The intern and first year resident interviews were conducted from one-third samples from Ochsner Clinic and Charity Hospital and a full 100% sample from Confederate Memorial Hospital in Shreveport. Final year resident interviews were conducted from a one-third sample of Charity Hospital, a full sample of Ochsner Clinic, and a full sample of Confederate Memorial Hospital. All eight family practice residents presently in training in Louisiana were also interviewed. Final results were adjusted in order to equalize the sample sizes.

---

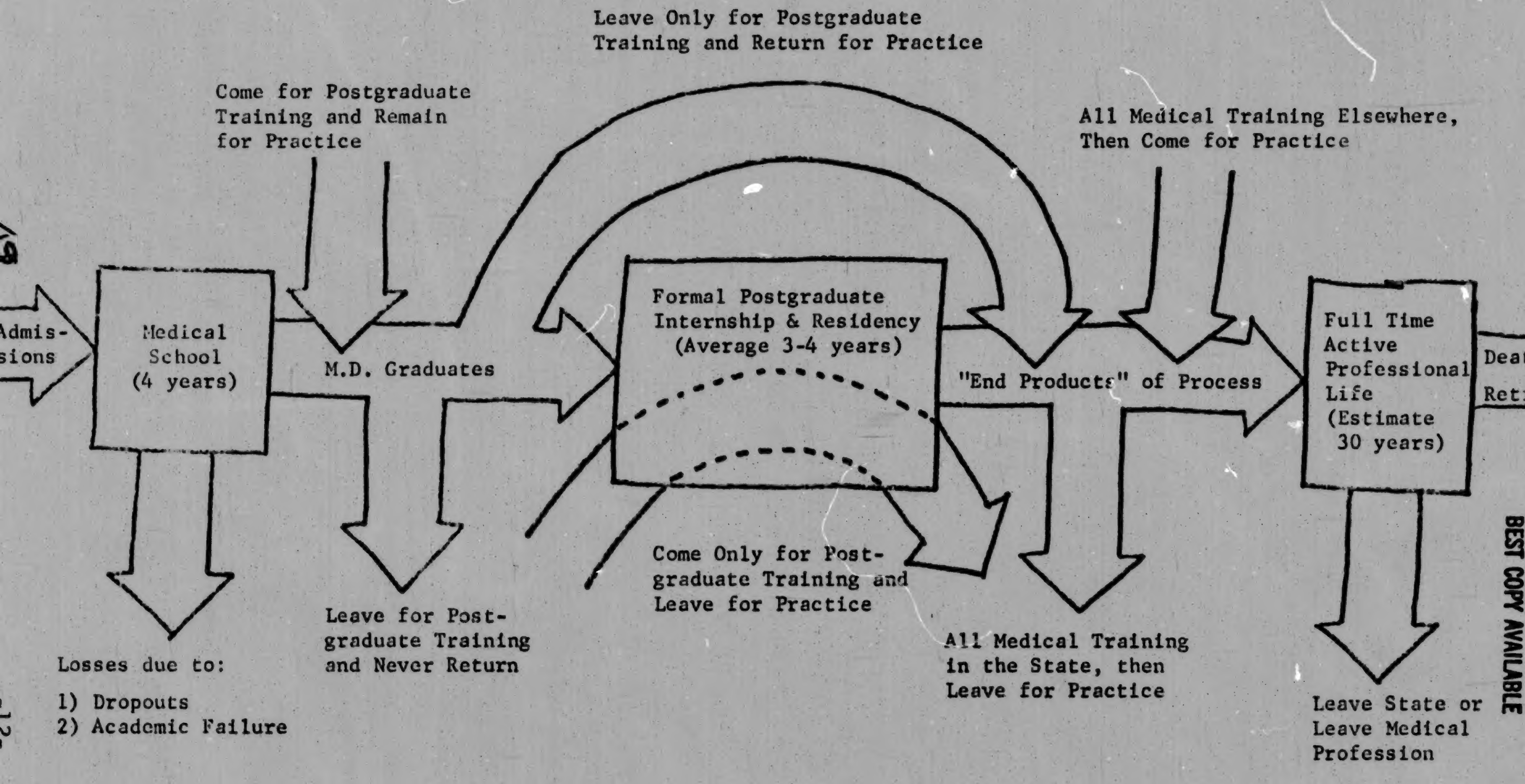
*See Appendix

As information has become available from the first three activities undertaken the expertise of Committee members was used to react to the data, to suggest modifications in methodology, and to develop clearer understanding as a group of the problems to be faced. The Committee consisted of administrators representing the institutions responsible for the major residency programs in Louisiana, the Louisiana State Medical Society, the Health Education Authority of Louisiana, the Louisiana State Department of Hospitals, Tulane and LSU Medical Centers, the Confederate Memorial Medical Center, Louisiana's agency for Comprehensive Health Planning, and the Louisiana Regional Medical Program. The composition of the Committee has been modified as necessary to guarantee continued representation of those institutions that hold major responsibilities in the physician manpower production process for Louisiana.

RESULTS
AND
INTERPRETATION
OF
PLANNING PROCESS

FIGURE 1

GRAPHIC OUTLINE OF PHYSICIAN MANPOWER PRODUCTION PROCESS


Leave Only for Postgraduate Training and Return for Practice
Come for Postgraduate Training and Remain for Practice
All Medical Training Elsewhere, Then Come for Practice
Admis-
sions
Medical School (4 years)
M.D. Graduates
Formal Postgraduate Internship & Residency (Average 3-4 years)
"End Products" of Process
Full Time Active Professional Life (Estimate 30 years)
Dea
Ret
Come Only for Post-graduate Training and Leave for Practice
Losses due to:
1) Dropouts
2) Academic Failure
Leave for Post-graduate Training and Never Return
All Medical Training in the State, then Leave for Practice
Leave State or Leave Medical Profession

BEST COPY AVAILABLE

Figure 1 is an oversimplified graphic outline of the physician manpower production process. As can be seen, it is divided into three major time periods. Namely, four years of medical school, an average of three to four years postgraduate training including internship and residency and the fulltime active professional life which is estimated to be approximately 30 years. The various arrows in the outline demonstrate the input and output of the manpower production system.

We are also interested in the various points of input into this process. Of course the most important point of entry, quantity-wise, is at admission. A number of trainees come after medical school training elsewhere for postgraduate training and then remain here for practice, or come from elsewhere after completing their postgraduate training and then find a place for practice in Louisiana. After admission, the following points explain the losses that occur. That is, losses in terms of people who spend their fulltime professional career in Louisiana. The first loss is from dropouts or academic failure in medical school. The second is those that leave after medical school for postgraduate training elsewhere and never return to the state of Louisiana. The third major point of egress is after residency when they leave for practice in a state other than Louisiana. A fourth point illustrates those few who change location of practice to another state after entering practice in Louisiana. This usually occurs within the first few years of practice if it is to occur at all. This last comment is made in terms of those physicians who are primarily involved in direct patient care. The final point of egress, of course, is death or retirement after a full professional life.

Three major patterns should be mentioned because of their frequency of occurrence. 1) Those who are admitted to medical school go on to take their postgraduate training here and then decide to stay in Louisiana for their professional practice career. This group indeed is the largest of the groups that we are dealing with in this model. 2) Those physicians who completed medical school here and then went elsewhere for their postgraduate training either in part or in full and then returned for their professional practice location in Louisiana. 3) The group that were trained elsewhere,come here for their postgraduate training in part or in full, and leave for some location other than Louisiana for their professional practice. There are many variations of the themes just described but this graphic outline does illustrate the major points of entrance and loss in the manpower production process as it affects the state of Louisiana.

Presently Available Data

The following series of tables were developed as of December, 1972 prior to receiving the AMA computer tapes of Louisiana Physicians and Graduates of Louisiana medical schools. The tables are presented as they were originally developed. It is planned to refine them in accordance with more accurate data when such become available.

Table 1 gives various estimates of the overall physician manpower need for Louisiana in 1982. In determining the base ratios for Louisiana and the United States (Estimates A and C), physicians included are active non-federal physicians of all professional activities as of December 31, 1970[1]. Physicians involved in research, teaching, or administrative activities are included since they, as well as patient care physicians, undergo the entire physician manpower production process previously described. In Estimate B the average prepayment group practice plan ratio of 1/1000 has been adjusted since this ratio includes only patient care physicians exclusive of interns and residents in hospitals[2]. In Louisiana in 1970, 340 physicians or 10% of the total active number excluding interns and residents were involved in activities other than patient care. Assuming that this 10% will remain constant in 1982, the ratio of 1/1000 represents 90% of the total number needed. Therefore, to adjust for the physicians not involved in patient care, the one physician is divided by .9 to get a ratio of 1.11 physicians needed per 1000 population. This ratio of 1.11/1000 equals 1/900.

TABLE 1

VARIOUS ESTIMATES OF PHYSICIAN NEED IN LOUISIANA 1982

	Base from which 1982 needs are projected	Physician/Population Ratio (Adjusted)	Physicians needed in La. 1982 Pop. 4,031,405[1]	No. of Physicians in La. 1970[2]
A.	Louisiana 1970 Phys./Pop. Ratio[2]	1/1056	3,818	3,449
B.	Prepayment Group Practice Plan[3]	1/900	4,479	
C.	U.S. 1970 Phys./Pop. Ratio[2]	1/873	4,618	
D.	U.S. 1970 Phys./Pop. Ratio with 20% Increase[4]	1/728	5,538	

---

[1] Burford, Roger L. and Sylvia G. Murzyn, Population Projections by Age, Race, and Sex for Louisiana and its Parishes 1970-1985, Occasional Paper Number 10, Division of Research, College of Business Administration, Louisiana State University, Baton Rouge, La; June 1972. The 1982 population figure is a linear interpolation of the 1980 and 1985 population projections of 3,954,789 and 4,146,327.

[2] Distribution of Physicians in the United States 1970, American Medical Association, Chicago, 1971. Included are all active non-federal physicians of all professional activities and excluded are interns and residents as of December 31, 1970.

[3] General ratio of 1/1000 from Health Manpower Perspective: 1967, U.S. Department of Health, Education and Welfare, Bureau of Health Manpower, Washington; 1967 has been adjusted to account for additional physicians not in patient care. In Louisiana in 1970, 340 physicians or 10% of the total excluding interns and residents were not in patient care.

[4] U.S. 1970 ratio of 1/873 is adjusted by adding 20% more physicians to adjust for a possible 20% increase in demand for service.

In Estimate D the U.S. 1970 ratio is adjusted so as to meet the possible increase in demand for health care services. The adjustment, expressed by $\frac{1+.20}{873}$, equals $\frac{1}{728}$. A 20% increase may not be too large an estimate for the next ten year period if the current trends in increased demand continue. A continuing increase in demand seems likely in view of proposed federal health legislation, the increased use of private health and hospital insurance, the steady rise in Louisiana in personal income and in median education, and also certain changes in the composition of the population of the state. According to Roger L. Burford's population projections for 1980[3] there will be a slight increase in the percent female and the percent white and a more substantial increase in the percent age 65 and over. The entire population of the state will in general be older, with the under 18 age group decreasing by 5.3%. Physicians visits data for the U.S. for 1970[4] shows an average of 4.6 visits per year per person as compared with 4.3 visits for 1969[5]. The 1970 rates also show the usual pattern of an increase in physicians visits as age progresses: from 3.9 visits per person for persons under 17 to 6.7 visits per person for those 65 and over. The data for 1969 also gives rates by sex, race, and income, with females having a higher visit rate than males at all ages except for those under 17 years and with whites having higher visit rates than non-whites in all age groups. The increase in visit rates by persons with lower incomes is attributed to the Medicare and Medicaid programs.

In summary, increase in demand for medical care seems to be a continuing trend. According to these four estimates, Louis-

TABLE 2

FIVE EXAMPLES ILLUSTRATING QUANTITATIVE ASPECTS OF THE PHYSICIAN MANPOWER PRODUCTION PROCESS

lus- ation	Number of Admissions Med School	Estimated Loss Before Graduation 1-3% (used 3%)	Number of Graduates	Percent Locating in Louisiana (LSU and Tulane combined)	Number to Practice in Louisiana (completed all post-graduate training)	Number with M.D. from out-of-state Med School to Practice in Louisiana	Total Number Added Each Year	Eventual Number of M.D. Maintained (30 yrs.)	Estimated Number in 1982
	328	10	318	44.6%	142	28	170	5,100	4,103
	328	10	318	58.2%	185	37	222	6,660	4,618
	725	21	318 (1st 7 yrs) 704 (last 3 yrs)	44.6%	142 (1st 7 yrs) 314 (last 3 yrs)	28	170 (1st 7 yrs) 342 (last 3 yrs)	10,260	4,618
	476	14	318 (1st 7 yrs) 462 (last 3 yrs)	44.6%	142 (1st 7 yrs) 206 (last 3 yrs)	28	170 (1st 7 yrs) 342 (last 3 yrs)	7,020	4,295
	476	14	318 (1st 7 yrs) 462 (last 3 yrs)	51.1%	163 (1st 7 yrs) 236 (last 3 yrs)	33 (1st 7 yrs) 47 (last 3 yrs)	199 (1st 7 yrs) 283 (last 3 yrs)	8,490	4,618

BEST COPY AVAILABLE

iana's need for physician manpower in 1982 ranges from 3,818 to 5,538 depending on the basis used for projecting need. Thus, it can be seen that a large increase in physicians' services or its equivalent (allied health personnel, etc.) will be necessary by 1982.

Table 2 illustrates quantitatively five possible avenues for Louisiana to modify its physician manpower production process using the concepts presented in the graphic model discussed earlier. In developing this table it was necessary to use gross approximations at certain points since reliable data were not available. Background information and assumptions to this table include: a) 3,605 active non-federal physicians in Louisiana in 1972[6]; b) Estimated loss of 3% of medical school admissions before graduation; and c) An average physician "fulltime working life" of about 30 years.

Illustration A shows the estimated number of physicians who will be practicing in Louisiana in 1982 if Louisiana continues to admit the same number of medical students and continues retaining and attracting physicians at the same rate as in the past. The number of admissions (328) is an estimate of the recent number of admissions occurring in the state. The 44.6% retained was a combined percent of about 60% for LSU graduates and 25% for Tulane graduates over the years. (The third medical school in Louisiana just graduated its first class in 1973.) The number of physicians attracted from out-of-state medical schools was determined at approximately 20% of currently practicing physicians in the state. If these physicians are distributed as entering the state over the 30 years of active professional life, approximately 28 would have entered per year. From the data available it could not be determined at what point in the manpower production process these out-of-state medical school graduates had entered the state for internship, residency or only for practice.

With the average white male life expectancy being about 69-70 years and with most physicians completing residency at age 30 or later, there remain about 39 years for fulltime active practice. Nine years were subtracted to account for change of profession, early retirement, and part-time practice. Therefore, it is estimated that there is a loss of about one-thirtieth of the physician population per year. It has been acknowledged that this is a very rough estimate of attrition since it does not take the age distribution of Louisiana's physicians into consideration, but it serves well enough for the purposes of illustration. If 1/30 is lost each year, then after 30 years a balance in loss and replacement will be reached. This is the 5,100 physicians who will be maintained in the long run. To determine the number of physicians in 1982 it was figured that about 1/30 of the starting number is lost each year and that 170 physicians entered practice in Louisiana each year. Thus, after ten (10) years, 4,103 physicians will be practicing in the state if Louisiana continues to produce, retain, and attract at present rates.

Illustration B indicates the increase in retention rate that will be necessary if Louisiana is to achieve the U.S. 1970

Physician/Population Ratio by 1980 (4,618 physicians) with the same number of medical school admissions of 1972. It is assumed here that an increase in the attractiveness of Louisiana for practice for graduates of Louisiana medical schools (increase in retention rate) will also mean an increase in the attractiveness of Louisiana for out-of-state medical school graduates (increase in attraction rate). The increase in attractiveness could take effect at different time periods in the production process. Depending on this factor, a varying delay period before entry into practice could lower the 1982 estimate as given. The great increase in the retention rate, from 44.6% to 58.2%, would probably be hard to achieve and very difficult to maintain.

Illustration C shows the increase in the number of medical school admissions necessary if Louisiana is to achieve the U.S. 1970 Physician/Population Ratio by 1982 without increasing the attractiveness of the state for practice (no increase in retention or attraction rates). This proposal, expansion of medical school capacity, would be extremely expensive. The increased number admitted would have an inherent time lag between admissions and graduation from medical school of four (4) years plus an average of three (3) years for completion of residency. Thus, the final effects of an increase in admissions would be felt only for the last three years of the ten year period. It also would lead to an excess of physicians in the long run unless future population growth warrants such a large rate of production.

Illustration D serves to show what the picture in 1982 will be if the medical schools in the state admit the maximum number of students now being considered and retention and attraction rates continue as in the past. The number for 1982 falls short of both the prepayment group practice and the U.S. 1970 Physician/Population Ratios. Again the time lag between increased medical school admissions and the physician specialist entering practice must be considered.

Illustration E appears to be a most reasonable compromise. To achieve 4,618 physicians by 1982, with medical school admissions at the capacity being considered, Louisiana would have to increase retention of in-state medical school graduates from 44.6% to 51.1%. Increased attractiveness of Louisiana for in-state medical school graduates would mean an increase in attractiveness for out-of-state medical school graduates for both residency and practice. The long term production rate of physicians would probably be more compatible with overall growth in population and increased demand for medical care.

After having examined need in total numbers, the next problem to be considered was physician need by specialty. Again U.S. 1970 and Prepayment Group Practice Specialty Ratios are used as bases of comparison for Louisiana.

Table 3 lists the specialties being studied and the Specialist/Population Ratios for Louisiana and for the U.S. in 1970[7] and the average Specialist/Population Ratio for 4-6 prepayment group practices.[8]* Again, the ratios for Louisiana and the

---

* Note on Rounding and Averaging: Where ratios were small, i.e., in the primary care specialties, rounding was to the nearest tenth. Also, any specialty ratio for a prepayment group that was totally different from all other ratios for that specialty was omitted in averaging so as to minimize distortion.

TABLE 3

TABLE 3

COMPARISON OF SOME PHYSICIAN SPECIALIST/POPULATION RATIOS FOR LOUISIANA AND THE UNITED STATES IN 1970 AND FOR PREPAYMENT GROUP PRACTICE

Specialty		La. 1970 Specialty Ratio[1]	U.S. 1970 Specialty Ratio[1]	Average Prepayment Group Practice Specialty Ratio[2]
General or Family Practice	Primary Care	1/4,400	1/3,830	1/5,000
Internal Medicine		1/11,000	1/7,050	1/4,300
Pediatrics		1/16,500	1/15,600	1/7,000
Anesthesiology		1/40,000	1/23,000	1/32,700
Dermatology		1/67,500	1/64,000	1/37,500
General Surgery		1/11,000	1/10,000	1/12,500
Neurology		1/145,700	1/103,700	1/109,600
Neurosurgery		1/140,000	1/108,400	1/111,000
Obstetrics-Gynecology		1/13,000	1/13,400	1/10,500
Ophthalmology		1/25,000	1/25,000	1/41,000
Orthopedic Surgery		1/31,000	1/29,000	1/28,000
Otolaryngology		1/43,000	1/49,000	1/45,000
Pathology		1/32,000	1/28,700	1/89,000[3]
Psychiatry		1/18,000	1/13,000	1/49,000[3]
Physical Medicine		1/728,600	1/206,700	1/105,600
Radiology		1/29,000	1/26,500	1/33,500
Urology		1/44,000	1/44,000	1/52,000
Research, Teaching, Administration, etc.		10% in these activities included in above	11% in these activities included in above	Not included in the above

BEST COPY AVAILABLE

---

[1] Distribution of Physicians in the Unites States 1970, AMA, Chicago, 1971. Includes all professional activities and excludes interns and residents.

[2] Ratios are based on average of the ratios of 4-6 prepayment group plans, as given in "Manpower Needs by Specialty", JAMA, Vol. 219, No. 12, March 20, 1972, p. 1621. These physicians are involved in patient care only.

[3]

TABLE 4

PHYSICIAN NEEDS BY SPECIALTY IN LA. . 1980-82 BASED ON 4,000,000 POPULATION

PHYSICIAN NEEDS BY SPECIALTY IN LA. 1980-82 BASED ON 4,000,000 POPULATION

TABLE 4

Specialty	Actual No. of La. Specialists 1970[1]	No. needed in 1980-82 to maintain La. 1970 Specialty Ratio[1]	No. needed in 1980-82 to achieve U.S. 1970 Specialty Ratio[1]	No. needed in 1980-82 to equal Prepayment Ratio[2]
General or Family Practice	833	909	1044	800
Internal Medicine	329	364	567	930
Pediatrics	221	242	256	571
Anesthesiology	91	100	174	122
Dermatology	54	59	63	107
General Surgery	330	364	400	320
Neurology	25	27	39	36
Neurosurgery	26	29	37	36
Obstetrics-Gyn.	283	308	299	381
Ophthalmology	145	160	160	98
Orthopedic Surgery	118	129	138	143
Otolaryngology	85	93	82	89
Pathology	113	125	139	45[3]
Psychiatry	202	222	308	82[3]
Physical Medicine	5	5	19	38
Radiology	126	138	151	119
Urology	83	91	91	77
All other specialties, unspecified, and unclassified	380(11%)	416		
Teaching, administration, Research, etc.	10% in these activities are included in the above	Included in above	11% in these activities for U.S. as a whole are included in the above	444 (10% of total)[5]
TOTAL	3449	3781	3967[4]	4438[6]

---

[1] Physician Specialty data and Specialty Ratios are based on data from Distribution of Physicians in the United States 1970, AMA, Chicago, 1971. Includes all active nonfederal physicians of all professional activities and excludes interns and residents as of December 31, 1970.

[2] Ratios are based on the average of the ratios of 4-6 prepayment group plans, as given in "Manpower Needs by Specialty", JAMA, Vol. 219, No. 12, March 20, 1972, P. 1621.

[3] Number is low because these services are contracted for outside the group usually.

[4] Does not include physicians in other specialties or unspecified and unclassified physicians. Therefore the total number is low.

will be involved in other activities.

TABLE 5

ACTIVE NONFEDERAL PHYSICIANS IN LA. 1970

(interns and residents excluded)

AGE DISTRIBUTION

	Under 35	35-44	45-54	55-64	Over 64	Unknown	Total
All Active Nonfederal	513	1134	1027	595	281	35	3585
M.D. in La. 1970	14%	32%	29%	17%	8%	1%	101%
General Practitioners	114	236	283	187	100	10	930
	12%	25%	30%	20%	11%	1%	99%
All Other Specialties	399	898	744	408	181	25	2655
	15%	34%	28%	15%	7%	1%	100%

/Median Age/ GP's = 50.3 years
All Other Specialties = 45.4 years
All Physicians = 46.2 years

Source: American Medical Association

Prepared by: Community Profiles Data Center USPHS

U.S. include all active non-federal physicians of all professional activities and exclude interns and residents. Interns and residents, though they do render service, were omitted since they have not completed the manpower production process and are not settled in practice.

Specialist/Population Ratios given in Table 3 were applied to the population of 1980-82 to estimate need for specialists in Louisiana in Table 4. The number of physician specialists practicing in the state as of December 31, 1970 is compared with these estimates. From this table we can see that Louisiana is doing rather well in most areas, particularly the surgical specialties. Major needs which were consistent throughout the various ratios were in the area of primary care, mainly internal medicine, family practice, and, to some extent, pediatrics. If the U.S. specialty ratios are applied, the specialties of anesthesiology and psychiatry would need further increase. If we tend toward the prepayment type of practice in the future, dermatology and obstetrics/gynecology would be the types of specialty needed in addition to the primary care area. In interpreting the needs in the primary care area, one must consider information in Table 5 showing that the average Louisiana GP is older than other physician specialists. Secondly, there is a rapidly growing trend for subspecialization in the field of internal medicine which would also lead to our underestimating the primary care needs.

The next logical question to ask is whether Louisiana is training an adequate number of each type of physician specialist needed to care for the population of the state. In Table 6 the

TABLE 6
COMPARISON OF THE PRESENT DISTRIBUTION OF FINAL YEAR RESIDENT POSITIONS OF VARIOUS MEDICAL SPECIALTIES WITH CERTAIN DISTRIBUTIONS PROJECTED FOR 1982

Specialty	Estimated No. of Residencies Now Offered in La. in Terms of Final Year Positions		Approximate Low 330 Final Year Residency Positions[1] Distributed According to 1970 U.S. Specialist/Pop. Ratio		Approximate Low 330 Final Year Residency Positions[1] Distributed According to Prepayment Group Practice Specialist/Pop. Ratio	
General or Family Practice	9[2]	75 Primary Care	87	155 Primary Care	59	170 Primary Care
Internal Medicine	44[3]		47		69	
Pediatrics	22		21		42	
Anesthesiology	10		14		9	
Dermatology	4		5		8	
General Surgery	29		33		24	
Neurology	3		3		3	
Neurosurgery	2		3		3	
Obstetrics-Gynecology	21		25		28	
Ophthalmology	11		13		7	
Orthopedic Surgery	11		11		11	
Otolaryngology	8		7		7	
Pathology	11		12		3	
Psychiatry	14		26		6	
Physical Medicine	-		2		3	
Radiology	15		13		9	
Urology	11		8		6	
Research, Teaching, Administration, etc.	Included Above		Included Above		Subtotal 297 33	(90% Patient Care) (10% Administration
TOTAL	225		330		330	Teaching, Research, etc.)

BEST COPY AVAILABLE

---

[1] Number needed to accommodate students currently being admitted to the medical schools in Louisiana, if there is to be a postgraduate position available to each graduate.

[2] General Practice M.D.s are older; number is decreasing yearly.

estimated number of final year residency positions in Louisiana by specialty are given. This is a measure of our capacity for training the various types of physician specialists each year in Louisiana. If in the future there is to be a residency position open to each student graduated from a Louisiana medical school, then the number of positions now offered is about 100 short of what will be needed to accommodate the class of 1976. It is apparent that 330 residency positions are a minimum of what will be needed by 1980, considering the expansion of first year medical student admissions that is planned. In Table 6 these 330 positions are distributed proportionately among the specialties listed according to the U.S. 1970 Specialist/Population Ratios and the Prepayment Specialist/Population Ratios. This table indicates that Louisiana has the capacity to produce adequate numbers in most specialties, but in the area of primary care our needs and our capacity for production are very incongruent.

Table 7 gives the total number of internship and residency positions offered and the number and percent filled beginning with the year 1965-66 and going through the year 1969-70[9]. The percentage filled for the internship positions has varied greatly. But for the residency positions offered in the state the percentage has steadily increased over the five year period. There is a large jump in percent filled, from 78% to 84% for the years 1968-1969 and 1969-1970. However, if the table is examined more closely it can be seen that actually a fewer number of positions were filled in 1969-70 than in 1968-69 and that the larger percentage filled for that year is due to the fact that fewer positions were offered. In order to really understand the problems related to

TABLE 7

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION (JAMA) EDUCATION NUMBER

Louisiana-Total Number of Residency Offered and Filled

YEAR	# OF HOSPITALS	# OF APPROVED PROGRAMS	TOTAL POSITIONS OFFERED	TOTAL POSITIONS FILLED	POSITIONS VACANT	PERCENTAGE FILLED
1969-1970	24	75	759	636	123	84%
1968-1969	17	81	810	649	161	78%
1967-1968	19	84	732	558	174	76%
1966-1967	15	87	739	561	178	76%
1965-1966	16	90	722	537	185	74%

Louisiana-Total Number of Internship Offered and Filled

YEAR	# OF HOSPITALS	# OF APPROVED PROGRAMS	TOTAL POSITIONS OFFERED	TOTAL POSITIONS FILLED	POSITIONS VACANT	PERCENTAGE FILLED
1969-1970	15	53	259	160	99	62%
1968-1969	5	22	115	62	53	54%
1967-1968	11	40	239	186	53	78%
1966-1967	9	40	247	178	69	72%
1965-1966	8	27	219	147	72	67%

our specialty needs, it is necessary to have information concerning the percentage of residency positions filled i[illegible]ach specialty to be evaluated. These data are not available for consideration at this time.

Another aspect to be considered is the person filling the position. For the U.S. as a whole, the influx of Foreign Medical Graduates has increased the percentage of positions filled. There are no trend data on the FMG in Louisiana currently available. However, for the year 1969-70 Foreign Medical Graduates were accepted for 92 or 14.5% of 636 positions. This compares with 33.0% of all residency positions filled in the United States[10]. The use of Foreign Medical Graduates is not viable as a long term solution for meeting Louisiana's physician manpower needs since present regulations discourage their selection of Louisiana for their permanent practice location.

Data from the American Medical Association Tapes

This section of the report deals with the preliminary analysis of data from the original computer tapes of the American Medical Association (AMA) which were mentioned in the methodology section of this report. As has already been stated, one of the three tapes requested, on residents, interns and fellows trained in Louisiana was not available at the time of this report. Therefore, the data analyzed are from the tape on graduates from Louisiana medical schools and the tape on physicians practicing in Louisiana as of December 31, 1972.

There are 7,085 non-federal practicing physicians who have graduated from Louisiana medical schools.* Of these 7,085 graduate physicians, 2,754 (38.9%) are presently practicing in Louisiana and 4,331 (61.1%) are practicing out of the state. As can be seen in Table 9, "Distribution of Non-Federal Physicians Graduating from Louisiana State Institutions by Year of Graduation and Practice State, December 31, 1972," the percent of graduates from Louisiana medical colleges remaining in Louisiana has been steadily increasing. This is partially due to the founding and increased enrollment of Louisiana State University Medical School in New Orleans. This figure should continue to increase due to the founding of LSU Medical School in Shreveport. It is unknown whether the 48.9% of the graduates from Louisiana medical colleges during the period 1965 to 1969 who are now practicing in Louisiana is an actual forecast of the percent who will be practicing here when all interns and residents have finished their training programs.

---

*excluding Interns and Residents

TABLE 8

DISTRIBUTION OF NON-FEDERAL PHYSICIANS* GRADUATED FROM LOUISIANA STATE INSTITUTIONS** BY YEAR OF GRADUATION - DECEMBER 31, 1972

Year of Graduation	Frequency	Percent
1899 & under	2	0.0
1900 - 1919	150	2.1
1920 - 1929	418	5.9
1930 - 1934	363	5.1
1935 - 1939	598	8.4
1940 - 1944	1083	15.3
1945 - 1949	853	12.0
1950 - 1954	1033	14.6
1955 - 1959	1063	15.0
1960 - 1964	926	13.1
1965 - 1969	476	6.7
1970 & above	120	1.7
Total	7085	100.0

* Excludes Interns and Residents

** Louisiana State University and Tulane University Schools of Medicine

TABLE 9

DISTRIBUTION OF NON-FEDERAL PHYSICIANS GRADUATED FROM LOUISIANA STATE INSTITUTIONS BY YEAR OF GRADUATION AND PRACTICE STATE - DECEMBER 31, 1972*

Year of Graduation	Practicing in Louisiana		Practicing Out of Louisiana		All Physicians*	
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cen
Up to 1919	58	38.2	94	61.8	152	100.0
1920 - 1929	139	33.3	279	66.7	418	100.0
1930 - 1939	319	33.2	642	66.8	961	100.0
1940 - 1944	374	34.5	709	65.5	1083	100.0
1945 - 1949	306	35.9	547	64.1	853	100.0
1950 - 1954	420	40.7	613	59.3	1033	100.0
1955 - 1959	445	41.9	618	58.1	1063	100.0
1960 - 1964	397	42.9	529	57.1	926	100.0
1965 - 1969	233	48.9	243	51.1	476	100.0
1970 -	63	52.5	57	47.5	120	100.0
Totals	2754	38.9	4331	61.1	7085	100.0

* Excludes Interns, Residents

BEST COPY AVAILABLE

TABLE 10

DISTRIBUTION OF NON-FEDERAL PHYSICIANS IN LOUISIANA BY STATE OF GRADUATION, EMPLOYMENT SECTOR AND YEAR OF GRADUATION--DECEMBER 31, 1972*

Year of Graduation	Louisiana Graduates		Other Graduates		Total Physicians	
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent
Up to 1919	59	63.4	34	36.6	93	100.0
1920 - 1929	139	67.8	66	32.2	205	100.0
1930 - 1939	319	67.6	153	32.4	472	100.0
1940 - 1944	374	75.6	121	24.4	495	100.0
1945 - 1949	306	68.2	143	31.8	449	100.0
1950 - 1954	420	73.9	148	26.1	568	100.0
1955 - 1959	445	75.3	146	24.7	591	100.0
1960 - 1964	397	65.3	211	34.7	608	100.0
1965 - 1969	232	64.1	130	35.9	362	100.0
1970 - 1974	63	67.0	31	33.0	94	100.0
Total	2755	70.0	1183	30.0	3938	100.0

*Excludes Interns and Residents

If this is the trend, Louisiana is in the position of maintaining a larger physician population from its medical colleges. This is not the case in the rest of the United States. In 1963, approximately 44.2% of all physicians in the United States were practicing in the states where they graduated from medical school. In 1967 only 43.0% were practicing in the states where they attended medical school. This decrease meant that if it was due to new practitioners, from the years 1963 to 1967, only 25.3% of the new medical practitioners were practicing in the states in which they graduated from medical college. If the 1965 to 1969 and the 1970 onward data do hold up as interns and residents finish their programs, then Louisiana will be one of the few states where strong links remain between the state of medical school graduation and the state of practice.

Table 10, "Distribution of Non-Federal Physicians in Louisiana by State of Graduation, Employment Sector and Year of Graduation, December 31, 1972," shows that of the 3,938 non-federal physicians practicing in Louisiana, 70.0% are graduates of Louisiana medical schools and 30.0% are graduates of other medical schools. When looking at the trend, it can be seen that with one exception, the percent of Louisiana graduates among the physician population increased on a percentage basis to 75.3% by 1955 to 1959. The period 1960 to 1964 shows a decrease to 65.3% educated in Louisiana medical colleges. If the findings in Table 9, that the percentage of graduates from Louisiana medical colleges staying in Louisiana for practice is increasing, are coupled with the findings in Table 10, that the percentage of physicians practicing in Louisiana that graduated from Louisiana medical colleges is decreasing, then the

BEST COPY AVAILABLE

TABLE 11

DISTRIBUTION OF NON-FEDERAL PHYSICIANS* GRADUATED FROM LOUISIANA STATE INSTITUTIONS BY STATE OF PRACTICE AND PROFESSIONAL ACTIVITY - DECEMBER 31, 1972

Major Professional Activity	Practicing in Louisiana Frequency	Practicing in Louisiana Per Cent	Practicing Out of Louisiana Frequency	Practicing Out of Louisiana Per Cent	Total Frequency	Total Per Ce
Patient Care						
Office Based	2262	40.1	3379	59.9	5641	100.0
Hospital Based--INT	0	0.0	0	0.0	0	0.0
Hospital Based--RES	1**	100.0	0	0.0	1	100.0
Hospital Based--DR	127	34.5	241	65.5	368	100.0
Other Professional Activities						
Med. Teaching	53	48.6	56	51.4	109	100.0
Administration	56	31.6	121	68.4	177	100.0
Research	26	36.6	45	63.4	71	100.0
Other	16	32.7	33	67.3	49	100.0
Inactive	127	32.9	259	67.1	386	100.0
Unclassified	86	45.5	103	54.5	189	100.0
Temporary Foreign	0	0.0	64	100.0	64	100.0
Address Unknown	0	0.0	30	100.0	30	100.0
Totals	2754	38.9	4331	61.1	7085	100.0

* Excludes Interns, Residents

** Recorded information for this individual was inconsistent

TABLE 12

BEST COPY AVAILABLE

DISTRIBUTION OF NON-FEDERAL PHYSICIANS* IN LOUISIANA, BY STATE OF GRADUATION AND MAJOR PROFESSIONAL ACTIVITY - DECEMBER 31, 1972

Major Professional Activity	Louisiana Graduates		Other Graduates		Total Physicians	
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent
Patient Care						
Office Based	2263	76.5	702	23.7	2965	100.0
Hospital Based--INT	0	0.0	0	0.0	0	0.0
Hospital Based--RES	1	100.0	0	0.0	1	100.0
Hospital Based--DR	127	46.5	146	53.5	273	100.0
Other Professional Activities						
Med. Teaching	53	39.8	80	60.2	133	100.0
Administration	56	61.5	35	38.5	91	100.0
Research	26	29.2	63	70.8	89	100.0
Other	16	43.2	21	56.8	37	100.0
Inactive	127	64.8	69	35.2	196	100.0
Not Classified	86	56.2	67	43.8	153	100.0
Totals	2755	64.8	1183	27.8	3938	100.0

* Excludes Interns, Residents

major explanation would seem to be an increased attractiveness of Louisiana to both Louisiana and other graduates. Although the total number of other graduates (Table 9) decreases in the time period 1965-1969, it must be remembered that a large percentage of these physicians are still involved in their postgraduate professional training. This factor should be remembered when interpreting many of the following tables.

Table 11, "Distribution of Non-Federal Physicians Graduated from Louisiana by State of Practice and Professional Activity, December 31, 1972," illustrates that 84.8% of physicians graduated from Louisiana medical schools are actively involved in patient care. The percentage is similar for those practicing in and out of state. If Table 12, "Distribution of Non-Federal Physicians in Louisiana by State of Graduation and Major Professional Activity, December 31, 1972" is examined, it can be seen that 82.2% of the physicians practicing in Louisiana are actively involved in patient care. Only 71.7% of the physicians attracted to Louisiana from medical schools outside of the state are actively involved in patient care. The major non-patient care activities that attract a greater percentage of graduates from other schools are medical teaching and medical research. This indicates that Louisiana medical schools are graduating an extremely high percentage of physicians interested in active patient care. If inactive physicians are removed from the computations, the percentage involved in direct patient care would rise to 91%.

It can be seen from Table 13, "Distribution of Non-Federal Physicians Graduated from Louisiana State Institutions by Primary Specialty and State of Practice," that of the 7,085 graduates from

BEST COPY AVAILABLE

TABLE 13

DISTRIBUTION OF NON-FEDERAL PHYSICIANS GRADUATED FROM LOUISIANA STATE INSTITUTIONS BY PRIMARY SPECIALTY AND STATE OF PRACTICE - DECEMBER 31, 1972*

(1 of 2)

Major Specialty Groups	Practicing in Louisiana		Practicing Out of Louisiana		Total Non-Federal Physicians	
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cen
General Practice	678	43.4	883	56.6	1561	22.0
Medical Specialties	576	39.5	881	60.5	1457	20.6
Surgical Specialties	928	37.5	1547	62.5	2475	34.9
Other Specialties	572	35.9	1020	64.1	1592	22.5
Total	2754	38.9	4331	61.1	7085	100.0
Medical Specialties						
Allergy	15	2.6	31	3.5	46	3.2
Cardiovascular Disease	41	7.1	81	9.2	122	8.4
Dermatology	51	8.9	71	8.1	122	8.4
Gastroenterology	16	2.8	15	1.7	31	2.1
Internal Medicine	259	45.0	394	44.7	653	44.8
Pediatrics	169	29.3	261	29.6	430	29.5
Pediatric Allergy	5	0.9	6	0.7	11	0.8
Pediatric Cardiology	4	0.7	2	0.2	6	0.4
Pulmonary Disease	16	2.8	20	2.3	36	2.4
Total	576	100.0	881	100.0	1457	100.0
Per Cents	39.5		60.5		100.0	
Surgical Specialties						
General Surgery	276	29.7	431	27.9	707	28.6
Neurological Surgery	14	1.5	40	2.6	54	2.2
Obstetrics and Gynecology	239	25.8	393	25.4	632	25.5
Ophthalmology	116	12.5	194	12.5	310	12.5
Orthopedic Surgery	103	11.1	151	9.8	254	10.3
Otolaryngology	74	8.0	132	8.5	206	8.3

*Excludes Interns and Residents

BEST COPY AVAILA

TABLE 13

DISTRIBUTION OF NON-FEDERAL PHYSICIANS GRADUATED FROM LOUISIANA STATE INSTITUTIONS BY PRIMARY SPECIALTY AND STATE OF PRACTICE - DECEMBER 31, 1972 *

(2 of 2)

Major Specialty Groups	Practicing in Louisiana		Practicing Out of Louisiana		Total Non-Federal Physicians	
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cen
Plastic Surgery	9	0.9	20	1.3	29	1.2
Colon and Rectal Surgery	10	1.1	20	1.3	30	1.2
Thoracic Surgery	13	1.4	24	1.6	37	1.5
Urology	74	8.0	142	9.2	216	8.7
Total	928	100.0	1547	100.0	2475	100.0
Per Cents	37.5		62.5		100.0	
Other Specialties						
Aerospace Medicine	1	0.2	5	0.5	6	0.4
Anesthesiology	69	12.1	111	10.9	180	11.3
hild Psychiatry	5	0.9	21	2.1	26	1.6
Diagnostic Radiology	9	1.6	26	2.5	35	2.2
Forensic Pathology	1	0.2	2	0.2	3	0.2
Neurology	12	2.1	18	1.8	30	1.9
Occupational Medicine	19	3.3	39	3.8	58	3.6
Psychiatry	136	23.8	227	22.3	363	22.8
Pathology	71	12.4	142	13.9	213	13.4
Physical Medicine and Rehab	2	0.3	9	8.8	11	6.9
General Preventive Medicine	5	0.9	10	1.0	15	9.4
Public Health	32	5.6	72	7.1	104	6.5
Radiology	90	15.7	145	14.2	235	14.8
Therapeutic Radiology	4	0.7	7	0.7	11	0.7
Other Specialty	68	11.9	147	14.4	215	13.5
Unspecified	48	8.4	39	3.8	87	5.5
Total	572		1020	100.0	1592	100.0
Per Cents	35.9		64.1		100.0	

Louisiana medical schools who are now practicing medicine, 1,561 (22%) are general practitioners, 1,457 (20.6%) are in the medical specialties, 2,475 (34.9%) are in surgical specialties and 1,592 (22.5%) are in other specialties. These percentages are similar whether the graduates remain or leave Louisiana, possibly with the exception of general practice. The medical specialties include allergy, cardiovascular diseases, dermatology, gastroenterology, internal medicine, pediatrics, pediatric allergies, pediatric cardiology and pulmonary diseases. The largest percent of graduates from Louisiana medical schools in the medical specialties are involved in internal medicine and pediatrics. Surgical specialties include general surgery, neurological surgery, obstetrics and gynecology, ophthamology, orthopedic surgery, otolaryngology, plastic surgery, colon and rectal surgery, thoracic surgery and urology. In the surgical category, the largest number of graduates are involved in general surgery and obstetrics and gynecology. Other specialists include aerospace medicine, anesthesiology, child psychiatry, diagnostic radiology, forensic pathology, neurology, occupational medicine, psychiatry, pathology, physical medicine, and rehabilitation, general preventive medicine, public health, radiology and therapeutic radiology and other specialties. The largest percent of physicians in other specialties are involved in psychiatry, radiology and pathology.

It can be seen from the table that Louisiana maintains 43.4% of its graduating general practitioners, 39.5% of its graduated medical specialists, 37.5% of its surgical specialists and 35.9% of its other specialists.

Table 14, "Distribution of Non-Federal Louisiana Physicians

BEST COPY AVAILABLE

TABLE 14

DISTRIBUTION OF NON-FEDERAL LOUISIANA PHYSICIANS BY PRIMARY SPECIALTY DECEMBER 31, 1972*

(1 of 2)

Major Specialty Groups	Louisiana Graduates		Other Graduates		Total Non-Federa Physicians	
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per C
General Practice	679	80.7	162	19.3	841	21.4
Medical Specialties	576	66.6	289	33.4	865	22.0
Surgical Specialties	928	74.2	322	25.8	1250	31.7
Other Specialties	572	58.2	410	41.8	982	24.9
Total	2755	70.0	1183	30.0	3938	100.0
Medical Specialties						
Allergy	15	2.6	6	2.1	21	2.4
Cardiovascular Disease	41	7.1	25	8.7	66	7.6
Dermatology	51	8.9	9	3.1	60	6.9
Gastroenterology	16	2.8	8	2.8	24	2.8
Internal Medicine	259	45.0	150	51.9	409	47.3
Pediatrics	169	29.3	75	26.0	244	28.2
Pediatric Allergy	5	0.9	5	1.7	10	1.2
Pediatric Cardiology	4	0.7	3	1.0	7	0.8
Pulmonary Disease	16	2.8	8	2.8	24	2.8
Total	576	100.0	289	100.0	865	100.0
Per Cents	66.6		33.4		100.0	
Surgical Specialties						
General Surgery	276	29.7	97	30.1	373	29.8
Neurological Surgery	14	1.5	14	4.4	28	2.2
Obstetrics and Gynecology	239	25.8	63	19.6	302	24.2
Ophthalmology	116	12.5	37	11.5	153	12.2
Orthopedic Surgery	102	11.0	41	12.8	144	11.5
Otolaryngology	74	8.0	21	6.5	95	7.6

TABLE 14

BEST COPY AVAILABLE

DISTRIBUTION OF NON-FEDERAL LOUISIANA PHYSICIANS BY PRIMARY SPECIALTY

DECEMBER 31, 1972 *

(2 of 2)

Major Specialty Groups	Louisiana Graduates		Other Graduates		Total Non-Feder Physicians	
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per C
Plastic Surgery	9	1.0	14	4.3	23	1.8
Colon and Rectal Surgery	10	1.1	3	0.9	13	1.0
Thoracic Surgery	13	1.4	9	2.8	22	1.8
Urology	74	8.0	23	7.1	97	7.8
Total	928	100.0	322	100.0	1250	100.0
Per Cents	74.2		25.8		100.0	
Other Specialties						
Aerospace Medicine	1	0.2	3	0.7	4	0.4
Anesthesiology	69	12.1	41	10.0	110	11.2
Child Psychiatry	5	0.9	7	1.7	12	1.2
Diagnostic Radiology	9	1.6	10	2.4	119	12.1
Forensic Pathology	1	0.2	2	0.5	3	0.3
Neurology	12	2.1	18	4.4	30	3.1
Occupational Medicine	19	3.3	14	3.4	33	3.4
Psychiatry	136	23.8	91	22.2	227	23.1
Pathology	71	12.4	61	14.9	132	13.4
Physical Medicine and Rehab	2	0.3	2	0.5	4	0.4
General Preventive Medicine	5	0.9	4	1.0	9	0.9
Public Health	32	5.6	18	4.4	50	5.1
Radiology	90	15.7	59	14.4	149	15.2
Therapeutic Radiology	4	0.7	2	0.5	6	0.6
Other Specialty	68	11.9	58	14.1	126	12.8
Unspecified	48	8.4	20	4.9	68	6.9
Total	572	100.0	410	100.0	982	100.0
Per Cents	58.2		41.8		100.0	

BEST COPY AVAILABLE

TABLE 15
DISTRIBUTION OF NON-FEDERAL PHYSICIANS IN LOUISIANA BY MAJOR SPECIALTY GROUP
STATE OF GRADUATION AND YEAR OF GRADUATION - DECEMBER 31, 1972

Year of Graduation	GENERAL PRACTICE				MEDICAL SPECIALTIES				SURGICAL SPECIALTIES				OTHER SPECIALTIES				Total	
	Graduates of Louisiana		Graduates Out of Louisiana		Graduates of Louisiana		Graduates of Louisiana		Graduates of Louisiana		Graduates Out of Louisiana		Graduates of Louisiana		Graduates Out of Louisiana			
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per
Up to 1919	9	60.0	6	40.0	10	71.4	4	28.6	9	56.3	7	43.7	31	64.6	17	36.4	93	2.
1920 - 1929	35	66.0	18	34.0	30	81.1	7	18.9	45	68.2	21	31.8	29	59.2	20	40.8	205	5.
930 - 1939	85	70.2	36	29.8	60	63.8	34	36.2	118	75.0	39	25.0	56	56.0	44	44.0	472	12.
1940 - 1944	102	85.7	17	14.3	87	77.0	26	23.0	139	80.8	33	19.2	46	51.1	45	48.9	495	12.
1945 - 1949	71	81.6	16	18.4	82	72.6	31	27.4	92	70.2	39	29.8		51.7	57	48.3	449	11.
1950 - 1954	143	88.8	18	11.2	77	65.3	41	34.7	129	81.1	30	18.9	71	54.6	59	45.4	568	14.
1955 - 1959	100	87.7	14	12.3	101	73.7	36	26.3	159	78.2	44	21.8	86	62.3	52	37.7	591	15.
1960 - 1964	81	77.9	23	22.1	70	52.6	63	47.4	158	69.6	69	30.4	88	61.1	56	38.9	608	15.4
1965 - 1969	46	82.1	10	17.9	57	59.4	39	40.6	70	66.7	35	33.3	60	56.6	46	43.4	363	9.2
1970 & after	7	63.6	4	36.4	2	20.0	8	80.0	10	66.7	5	33.3	44	75.9	14	24.1	94	2.4
Total Frequency and Per Cent In State	679	80.7	162	19.3	576	66.6	289	33.4	928	74.2	323	25.8	572	58.2	410	41.8		
	841				865				1250				982				3938	100.0

BEST COPY AVAILABLE

by Primary Specialties, December 31, 1972" illustrates that 80.7% of the state's general practitioners, 66.6% of its medical specialists, 74.2% of its surgical specialists and 58.2% of its other specialists were educated in Louisiana medical schools. A total of 70.0% of the physicians practicing in Louisiana were educated in Louisiana medical schools. Therefore, the medical schools in Louisiana provide the state with a larger percentage of its general practitioners and surgical specialists. A larger percentage of medical specialists and other specialists come to Louisiana from outside of the state. When this table is then compared with Table 15, "Distribution of Non-Federal Physicians in Louisiana by Major Specialty Group, State of Graduation and Year of Graduation," it can be seen that the total number of general practitioners has been steadily decreasing since the period of 1950-1954. If, in fact, this is actually a permanent trend, it will become necessary for the state to either attract more GP's from outside of the state or to increase the number of general practitioners trained within the state or both. The surgical specialties have shown a steady increase through 1960-1964. This group of specialties is the one in which Louisiana equals or surpasses national physician to patient population ratios. This table also indicates that for the period 1960-1964 only 52.6% of Louisiana's medical specialists were graduated from Louisiana medical schools. This is even more significant when compared to the 1955-1959 figure of 73.7%. Although the total number of medical specialists entering practice in Louisiana is similar for the two time periods, Louisiana has become dependent upon attracting specialists from other states to maintain this number. When this area is examined in Table 16, "Distribution of

TABLE 16

DISTRIBUTION OF NON-FEDERAL PHYSICIANS GRADUATED FROM LOUISIANA STATE INSTITUTIONS BY MAJOR SPECIALTY GROUP, STATE OF PRACTICE AND YEAR OF GRADUAT[illegible]- DECEMBER 31, 1972

Year of Graduation	GENERAL PRACTICE				MEDICAL SPECIALTIES				SURGICAL SPECIALTIES				OTHER SPECIALTIES				Total	
	Practicing in Louisiana		Practicing Out of Louisiana		Practicing in Louisiana		Practicing Out of Louisiana		Practicing in Louisiana		Practicing Out of Louisiana		Practicing in Louisiana		Practicing Out of Louisiana			
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent
p to 1919	8	23.5	26	76.5	10	55.6	8	44.4	9	34.6	17	65.4	31	41.9	43	58.1	152	2.1
920 - 1929	35	30.2	81	69.8	30	46.2	35	53.8	45	33.3	90	66.7	29	28.4	73	71.6	418	5.9
930 - 1939	85	32.7	175	67.3	60	35.9	107	64.1	118	33.1	238	66.9	56	31.5	122	68.5	961	13.6
40 - 1944	102	40.3	151	59.7	87	38.8	137	61.2	139	32.6	288	67.4	46	25.7	133	74.3	1083	15.3
45 - 1949	71	39.9	107	60.1	82	38.1	133	61.9	92	35.0	171	65.0	61	31.0	136	69.0	853	12.0
50 - 1954	143	46.9	162	53.1	77	38.1	125	61.9	129	41.6	181	58.4	71	32.9	145	67.1	1033	14.6
55 - 1959	100	53.2	88	46.8	101	40.6	148	59.4	150	41.0	227	59.0	86	35.7	155	64.3	1063	15.0
60 - 1964	81	59.1	56	40.9	70	36.8	120	63.2	158	39.9	238	60.1	88	43.4	115	56.6	926	13.1
65 - 1969	48	59.0	32	41.0	57	49.1	59	50.9	70	45.2	85	54.8	60	47.2	67	52.8	476	6.7
70 & after	7	58.3	5	41.7	2	18.2	9	81.8	10	45.5	12	54.5	44	58.7	31	41.3	120	1.7
tal Fre- ency and r Cent in ate	678	43.4	883	56.6	578	39.5	881	60.5	928	37.5	1547	62.5	572	35.9	1020	64.1	7085	100.0

BEST COPY AVAILABLE

Non-Federal Physicians Graduated from Louisiana State Institutions by Major Specialty Group, State of Practice and Year of Graduation, December 31, 1972," it can be seen that the total number of graduates in medical specialties decreased sharply during the period 1960-1964 when compared with 1955-1959. Since there appears to be a continuing need for more physicians in the area of primary care, e.g., general internal medicine, the trend for fewer Louisiana graduates to enter into this specialty area should be overcome.

It is also interesting to note when examining this table that the number of Louisiana graduates entering into general practice have been sharply decreasing since the period 1950-1954. Fortunately, the percentage of those remaining in Louisiana has been increasing, however, this trend has not been significant enough to make up for the smaller number of general practitioners graduating from Louisiana medical colleges. Again this points to the need for stimulating more medical students to enter into a career of primary care practice.

Description and Interpretation of the Data Gathered from the Interviews of Senior Medical Students, Interns, First Year Residents, Final Year Residents, and all Family Practice Residents in Louisiana

The data from the interviews was gathered and arranged into 19 tables. For the most part, the data gathered from medical student interviews were kept separate from the data gathered on interns and residents. All data will be adjusted according to the methods described in the methodology section of this report. Before proceeding, it is necessary to make a few comments on the Tulane sample. As one notices in Table 17, 20 of 23 students interviewed from Tulane were classified as out-of-state. This means that their home towns were located as those that existed in another state. There were 3 students classified as in-state. These figures correspond to the 13% figure given by Tulane as the number of in-state students enrolled in the 1973 class. It must also be noted that Tulane, unlike LSU in New Orleans and LSU in Shreveport, is a regional school that draws its student population from all over the United States, and especially from southern areas of the country.

Table 17, Future Training Location of Senior Medical Students by Medical School, shows where senior medical students plan to pursue their internship or residency training once they have graduated from medical school. Of the 152 students classified as in-state, 80 (52.6%) were remaining for training, 64 (42.1%) were leaving, while 8 (5.3%) were undecided. Of the 91 out-state students, only 13 (14.3%) were planning to remain for training while 73 (80.2%) were planning to leave, and 5 (5.5%) had not yet decided. This table becomes important when examined in the light of information

TABLE 17

FUTURE TRAINING LOCATION OF SENIOR MEDICAL STUDENTS BY MEDICAL SCHOOL

School	Total Number Interviewed	Non Response	Adjusted Total	Number of Graduates Remaining	Number of Graduates Leaving	Undecided
LSU New Orleans	31	2	124	64	52	8
Instate	29		116	64	44	8
Outstate	2		8	0	8	0
LSU Shreveport	27	3	27	13	13	1
Instate	24		24	12	12	0
Outstate	3		3	1	1	1
Tulane	23	12	92	16	72	4
Instate	3		12	4	8	0
Outstate	20		80	12	64	4
Total	81	17	243	93	137	13
Instate	56		152	80	64	8
Outstate	25		91	13	73	5

published in much of the literature, including the report to the Ohio Board of Regents on Physician Demography in Ohio, 1971. It states that the most important factor of where a physician will locate is the correlation between location of residency and location of practice. A corresponding study by Tuxill for the Rochester Regional Hospital Council shows that the largest number of physicians decided on their practice location during internship and residency training.

In Table 18, Future Practice Location of Senior Medical Students by Training Location and by Medical School, we find that of the 93 students remaining for training in Louisiana, 48 (52.7%) are planning to remain for practice, 9 (9.9%) are planning to leave for practice, and 36 (39.6%) are undecided. Of the 13 students who are classified as out-state in this group remaining for training, none were planning on remaining for practice, 8 were planning on leaving, and 5 were undecided. It must be noted that this number is too small to use for drawing inference. Of the 137 students leaving for training, 66 (48.2%) were planning to leave the state for practice, 28 (20.4%) were planning to remain in the state for practice and 43 (31.4%) had not yet decided whether they would return to Louisiana for practice or practice elsewhere. It must be noted here that all of the students planning to remain for practice were classified as in-state students and that none of the out-state students in either of the groups remaining for training or leaving for training are at this time planning to practice in Louisiana. In addition, 52.6% of the in-state students as of the time of the interview, had decided that they would remain in Louisiana for practice.

BEST COPY AVAILABLE

TA. - 18

FUTURE PRACTICE LOCATION OF SENIOR MEDICAL STUDENTS BY TRAINING LOCATION AND BY MEDICAL SCHOOL

	LSU New Orleans		LSU Shreveport		Tulane		Total	
	Instate	Outstate	Instate	Outstate	Instate	Outstate	Instate	Outstate
Remaining for Training	64	0	12	1	4	12	80	13
Leaving for Practice	0	0	1	0	0	8	1	8
Remaining for Practice	36	0	8	0	4	0	48	0
Undecided	28	0	3	1	0	4	31	5
Leaving for Training	44	8	12	1	8	64	64	73
Leaving for Practice	12	0	1	1	0	52	13	53
Returning for Practice	20	0	4	0	4	0	28	0
Undecided	12	8	7	0	4	12	23	20
Undecided on Training	8	0	0	1	0	4	8	5
Leaving for Practice	0	0	0	0	0	4	0	4
Remaining for Practice	4	0	0	0	0	0	4	0
Undecided	4	0	0	1	0	0	4	1
Total	116	8	24	3	12	80	152	91
Leaving for Practice	12	0	2	1	0	64	14	65
Remaining for Practice	60	0	12	0	8	0	80	0
Undecided	44	8	10	2	4	16	58	26

Table 19 is entitled Influence of Medical Schools in Decisions of Senior Medical Students Regarding General Practice in Areas of Family Practice, Pediatrics and Internal Medicine by Future Specialty." The table was developed to determine what type of influence the medical schools themselves had on the decision of the students regarding the three primary care fields of family practice, pediatrics, and internal medicine. The students were asked to respond as to whether the medical school influence was favorable, unfavorable or no influence. It is found that in all three specialties, the overall influence was favorable (58% favorable for family practice, 58% favorable for pediatrics and 61% favorable for internal medicine). Overall, 59% felt that they were favorably influenced by the medical schools toward the three primary care fields.

This table is even more interesting when compared to Table 20 Future Practice Locations for Senior Medical Students by Training Location and by Specialty. In this table, pediatrics was included within other medical specialties. Here it is discovered that 20 (80%) of the 25 medical students interested in family practice are leaving the state for training and only 5 of them are presently planning to return for practice. Overall, 10 (40%) of the 25 family practice residents are planning to return, 8 (32%) are planning to leave, and 7 (28%) are undecided. Only 9 (18%) out of the 50 future internal medicine residents are planning to return, 21 (42%) are leaving for practice and 20 (40%) have not decided. The majority of the 31 students entering other medical specialties were either planning to leave Louisiana for practice or were undecided, with only 9 (29.0%) students planning to practice in the state. This indicates that while Louisiana medical colleges present an overall favorable

TABLE 19

INFLUENCE OF MEDICAL SCHOOLS IN DECISIONS OF SENIOR MEDICAL STUDENTS REGARDING GENERAL PRACTICE IN AREAS OF FAMILY PRACTICE, PEDIATRICS AND INTERNAL MEDICINE BY FUTURE SPECIALTY

	FAMILY PRACTICE			PEDIATRICS			INTERNAL MEDICINE			TOTAL FOR PRIMARY CARE		
	Favorable	Unfavorable	No Influence	Favorable	Unfavorable	No Influence	Favorable	Unfavorable	No Influence	Favorable	Unfavorable	No Influence
Family Practice	12	5	9	12	5	9	12	5	9	36	15	27
Internal Medicine	30	5	14	34	9	6	42	1	6	106	15	26
Pediatrics	17	0	4	17	0	4	17	0	4	51	0	12
Surgery	8	4	2	8	4	2	4	8	2	20	16	6
Other Surgical Specialties	18	13	10	18	13	10	22	9	10	58	35	30
Other Medical Specialties	0	10	0	0	10	0	0	10	0	0	30	0
Other	25	5	8	29	5	4	25	13	0	79	23	12
Undecided	31	12	1	23	20	1	27	16	1	71	48	3
Total	141	54	48	141	66	36	149	62	32	421	182	116
	58%	22%	19%	58%	27%	15%	61%	26%	13%	59%	25%	16%

BEST COPY AVAILABLE

TABLE 20

FUTURE PRACTICE LOCATION OF SENIOR MEDICAL STUDENTS BY TRAINING LOCATION AND BY SPECIALTY

	Family Practice	Medicine	Surgery	Other Medical Specialty	Other Surgical Specialty	Other Specialty	Undecided Specialty	Total
Remaining for Training	5	21	4	9	24	16	14	93
Leaving for Practice	0	1	0	0	0	4	4	9
Remaining for Practice	5	9	0	5	15	8	6	48
Undecided	0	11	4	4	9	4	4	36
Leaving for Training	20	24	10	14	17	22	30	137
Leaving for Practice	8	16	10	12	0	8	12	66
Returning for Practice	5	0	0	0	8	10	5	28
Undecided	7	8	0	2	9	4	13	43
Undecided on Training	0	5	0	8	0	0	0	13
Leaving for Practice	0	4	0	0	0	0	0	4
Remaining for Practice	0	0	0	4	0	0	0	4
Undecided	0	1	0	4	0	0	0	5
Total	25	50	14	31	41	38	44	243
Leaving for Practice	8	21	10	12	0	12	16	79
Returning/Remaining	10	9	0	9	23	18	11	80
Undecided	7	20	4	10	18	8	17	84

BEST COPY AVAILABLE

influence on medical students towards primary care, the trainees do not perceive a favorable picture of primary care practice in Louisiana.

The largest return rate exists in "other surgical specialties". When this table is examined in light of shortages by specialty in Louisiana, it is found that those specialties listed as "other surgical specialties" are those areas of medicine in which Louisiana comes closest to the national and group averages.

Examination of those groups remaining for training and leaving for training illustrates another interesting aspect of Table 20. Of the 93 students remaining for training, 36 (38.7%) are undecided as to whether they will practice in Louisiana; 43 (31.4%) of the 137 students leaving for training are also undecided on practice location. It seems that those 36 students remaining in Louisiana and undecided on practice location are in the most important and most available group to influence towards a practice located in Louisiana. The second most important group would be the 43 Louisiana trained medical students who are leaving for postgraduate training. While still undecided in terms of practice location, the factors that these two undecided groups find attractive in practice locations should be examined and compared with those leaving for practice and those remaining for practice.

First, however, the factors which have influenced where a student will train must be scrutinized. Each student interviewed was asked to rank the following factors as a: 1) major influence, 2) contributing influence, or 3) minor influence or no influence at all, regarding the location of their future postgraduate medical training: REPUTATION OF SPECIALTY PROGRAM OR DIRECTOR, PRESTIGE OF INSTITUTION, IMPRESSED WITH STAFF, IMPRESSED WITH FACILITIES,

TABLE 21

FACTORS INFLUENCING THE DECISION OF FUTURE TRAINING LOCATION FOR SENIOR MEDICAL STUDENTS, BY MEDICAL SCHOOL

	Total Interviewed	Total Interviewed (Adjusted)	Reputation of Specialty Program or Director	Prestige of Institution	Impressed With Staff	Impressed With Facilities	Geographic Location	Recreational Facilities	Cultural Resources	Salary	Other Economic Reasons	Family Ties	Change of Scenery	Spouse Working Here	Job Opportunities For Wife	Did Not Wish to Move Family	Good Education For Children	Total # Married	Total # With Children	Other
Remaining for Training																				
LSU New Orleans	16	64	380	400	480	300	480	220	240	120	80	200	200	100	180	100	60	40	16	320
LSU Shreveport	13	13	80	55	120	60	120	55	40	15	65	30	5	55	60	55	30	11	4	50
Tulane	4	16	120	100	100	120	100	40	80	0	40	0	60	40	40	60	0	4	0	40
Leaving for Training																				
LSU New Orleans	13	52	280	200	400	320	440	300	160	380	60	60	380	40	100	0	100	44	16	240
LSU Shreveport	13	13	70	65	100	125	110	65	75	70	20	10	75	0	35	0	15	11	4	40
Tulane	18	72	540	400	400	460	520	360	260	260	40	200	400	0	100	20	60	44	8	240
Undecided																				
LSU New Orleans	2	8	60	60	60	60	60	20	20	20	0	40	20	0	0	40	0	4	0	120
LSU Shreveport	1	1	0	0	5	5	5	0	0	5	0	0	5	0	0	0	0	0	0	0
Tulane	1	4	40	40	0	0	0	0	0	0	0	0	0	0	40	0	0	4	0	0
Totals																				
LSU New Orleans	31	124	720	660	940	680	980	540	420	520	140	300	600	140	280	140	160	88	32	680
LSU Shreveport	27	27	150	120	225	190	235	120	115	90	85	40	85	55	95	55	45	20	4	90
Tulane	23	92	700	540	500	580	620	400	340	260	80	200	460	40	180	80	60	52	8	280
	81	243	1570	1320	1665	1450	1835	1060	875	870	300	540	1145	235	555	275	265	160	44	1050

BEST COPY AVAILABLE

TABLE 22

RANKED FACTORS WHICH INFLUENCED THE DECISION OF SENIOR MEDICAL STUDENTS ON TRAINING LOCATION, BY TRAINING LOCATION

	Total		Remaining for Training		Leaving for Training	
	Rank	Per Cent	Rank	Per Cent	Rank	Per Cen
Geographic Location	1	75.5%	1-2	75.3%	1	78.1%
Impressed With Staff	2	68.5%	1-2	75.3%	2-3	65.7%
Reputation of Specialty Program or Director	3	64.6%	3-4	62.4%	4	65.0%
Impressed With Facilities	4	59.7%	3-4	62.4%	2-3	65.7%
Prestige of Institution	5	54.3%	5	59.7%	8	48.5%
Change of Scenery	6	47.1%	9	28.5%	5	62.4%
Recreation	7	43.6%	7	33.9%	6	52.9%
Cultural Resources	8	36.0%	6	38.7%	9	36.1%
Salary	9	35.8%	14	14.5%	7	51.8%
Job Opportunities for Spouse*	10	22.8%	8	30.1%	11	17.2%
Family Ties	11	22.2%	10	24.7%	10	19.7%
Other Economic Reasons	12	12.3%	13	19.9%	13	8.8%
Did Not Wish to Move Family	13	11.3%	11	23.1%	15	1.5%
Good Education for Children	14	10.9%	15	9.7%	12	12.8%
use Working Here	15	9.7%	12	21.0%	14	2.9%

---

* When Job Opportunities for Spouse are adjusted for those students who are married, the percentage was found to be 50.9% for those remaining versus 23.7% for those leaving.

GEOGRAPHIC LOCATION, RECREATION FACILITIES, CULTURAL RESOURCES, SALARY, OTHER ECONOMIC REASONS, FAMILY TIES, CHANGE OF SCENERY, SPOUSE WORKING HERE, JOB OPPORTUNITIES FOR WIFE, DID NOT WISH TO MOVE FAMILY, and GOOD EDUCATION FOR CHILDREN. Major factors were assigned a numerical value of 10, contributing factors were assigned a value of 5 and minor or no influence factors were assigned a value of 0. The results are given in Table 21 and Table 22. Table 21, Factors Influencing the Decision of Future Training Location for Senior Medical Students by Medical School, gives the total score of each factor for those remaining for training, leaving for training and undecided for training location by all three Louisiana medical schools. Table 22, Ranked Factors Which Influenced the Decision of Senior Medical Students on Training Location by Training Location, ranks the 15 factors, 1 through 15, and gives the percent score out of a possible perfect 100%R. The factors are given in the order in which they are ranked in the total column of Table 21. The most important factor influencing training location are GEOGRAPHIC LOCATION, IMPRESSED WITH STAFF, REPUTATION OF SPECIALTY PROGRAM OR DIRECTOR, IMPRESSED WITH FACILITIES, and PRESTIGE OF THE INSTITUTION. It can be seen that both CHANGE OF SCENERY and RECREATIONAL FACILITIES are more important for those leaving for training as is SALARY. JOB OPPORTUNITIES FOR SPOUSE is more important for those remaining for training. When JOB OPPORTUNITIES FOR SPOUSE are adjusted to those students who are married, it is found that it is rated 50.9%R for those who are remaining for training and 23.7%R for those who are leaving for training. This indicates that it is more important for those students remaining in Louisiana for training to have employed spouses

TABLE 23

FACTORS INFLUENCING THE DECISION OF FUTURE PRACTICE LOCATION FOR SENIOR MEDICAL STUDENTS BY FUTURE PRACTICE LOCATION AND MEDICAL SCHOOL ATTENDED

	Total Interviewed	Adjusted Total	Married	Have Children	Recreational Activities	Joining Practice of Friend or Family	Non-professional Family Ties	Healthy Climate to Raise Children	Educational Opportunities for Children	Attraction of Location for Spouse	Desire to Remain in Academia	Favorable Climate	Desired Community Size	Most Favorable Geographic Area of Location	Financial Opportunities	Cultural Resources	Favorable Hospital Affiliation	Need for Specialty in Community	Favorable Professional Climate	Availability of Allied Health Personnel
Remaining for Practice	29	80	52	18	600	240	335	660	545	395	420	545	675	565	555	415	130	240	110	40
LSU New Orleans	15	60	40	12	440	140	200	480	400	300	320	400	500	400	400	280	120	200	80	40
LSU Shreveport	12	12	8	2	80	20	55	100	65	55	60	85	95	85	75	55	10	40	30	0
Tulane	2	8	4	4	80	80	80	80	80	40	40	60	80	80	80	80	0	0	0	0
Leaving for Practice	22	79	55	9	360	145	240	545	445	380	335	420	595	545	290	390	90	200	90	10
LSU New Orleans	3	12	12	4	40	0	0	120	100	80	80	120	120	100	80	20	0	0	40	0
LSU Shreveport	3	3	3	1	20	5	0	25	25	20	15	20	15	25	10	10	10	0	10	10
Tulane	16	64	40	4	300	140	240	400	320	280	240	280	460	420	200	360	80	200	40	0
Undecided	30	84	49	13	585	150	215	670	650	430	370	635	730	650	640	510	160	320	130	0
LSU New Orleans	13	52	36	12	340	140	120	400	400	200	160	400	460	360	460	340	120	200	120	0
LSU Shreveport	12	12	9	1	85	10	35	90	90	90	110	95	110	90	80	70	40	40	10	0
Tulane	5	20	4	0	160	0	60	180	160	140	100	140	160	200	100	100	0	80	0	0
Totals	81	243	156	40	1545	535	790	1875	1640	1205	1125	1600	2000	1760	1485	1315	380	760	330	50
LSU New Orleans	31	124	88	28	820	230	320	1000	900	580	560	920	1080	860	940	640	240	400	240	40
LSU Shreveport	27	27	20	4	185	35	90	215	180	165	185	200	220	200	165	135	60	80	50	10
Tulane	23	92	48	8	540	220	380	660	560	460	380	480	700	700	380	540	80	280	40	0

BEST COPY AVAILABLE

than those leaving Louisiana for training. Probably this result is influenced by Louisiana's ranking lowest in all states in salaries offered.

Table 23, Factors Influencing Decision of Future Practice Locations for Senior Medical Students by Future Practice and Medical School Attended, is similar to Table 21. Factors which might influence future practice decisions of senior medical students were read to the senior medical students and they were asked to rank these factors as a major influence, contributing influence, or minor or no influence. The factors were RECREATIONAL ACTIVITIES, JOINING PRACTICE OF FRIEND OR FAMILY, NON-PROFESSIONAL FAMILY TIES, HEALTHY CLIMATE TO RAISE CHILDREN, EDUCATIONAL OPPORTUNITIES FOR CHILDREN, ATTRACTION OF LOCATION FOR SPOUSE, DESIRE TO REMAIN IN ACADEMIA, FAVORABLE CLIMATE, DESIRED COMMUNITY SIZE, MOST FAVORABLE GEOGRAPHIC AREA OF LOCATION, FINANCIAL OPPORTUNITIES, and CULTURAL RESOURCES. In all the questions asked of medical students, interns and residents where there were numerous choices, the interviewee was first asked to respond without being given the choices. In the case of the factors influencing the decision of future practice location, four answers not listed as choices were frequently given. These were favorable hospital affiliation, need for specialty in community, favorable professional climate and the availability of allied health personnel. While none of these answers ranked extremely high, some extra significance must be given to them as they were volunteered and not offered as a choice. Of these, need for specialty in the community was the most important.

Table 24, Ranked Factors Influencing Practice Location of Senior Medical Students by Practice Location, shows each of the 12 factors

TABLE

RANKED FACTORS INFLUENCING PRACTICE LOCATION OF SENIOR MEDICAL STUDENTS BY PRACTICE LOCATION

	Total		Remaining for Practice		Leaving for Practice		Undecided for Practice	
	Rank	Per Cent	Rank	Per Cent	Rank	Per Cent	Rank	Per Cent
Desired Community Size	1	82.3%	1	84.4%	1	75.3%	1	86.9%
Healthy Climate to Raise Children	2	77.2%	2	82.5%	2-3	69.0%	2	79.8%
Most Favorable Geographic Area of Location	3	72.4%	4	70.6%	2-3	69.0%	3-4	77.4%
Educational Opportunities for Children	4	67.5%	6-7	68.1%	4	56.3%	3-4	77.4%
Favorable Climate	5	65.8%	6-7	68.1%	5	53.2%	6	75.6%
Recreational Activities	6	63.6%	3	75.0%	8	45.6%	7	69.6%
Financial Opportunities	7	61.1%	5	69.4%	10	36.7%	5	76.2%
Cultural Resources	8	54.1%	9	51.9%	6	49.4%	8	60.7%
Attraction of Location for Spouse	9	49.6%	10	49.4%	7	48.1%	9	51.2%
Desire to Remain in Academia	10	46.3%	8	52.5%	9	42.4%	10	44.0%
Non-Professional Family Ties	11	32.5%	11	41.9%	11	30.4%	11	25.6%
Joining Practice of Friend or Family	12	22.0%	12	30.0%	12	18.4%	12	17.9%

BEST COPY AVAILABLE

given as a choice to the interviewee and its rank as well as its percent out of a possible 100%R. The five most important factors were DESIRED COMMUNITY SIZE, HEALTHY CLIMATE TO RAISE CHILDREN, MOST FAVORABLE GEOGRAPHIC AREA OF LOCATION, EDUCATIONAL OPPORTUNITIES FOR CHILDREN, and FAVORABLE CLIMATE. RECREATIONAL ACTIVITIES and FINANCIAL OPPORTUNITIES also ranked above 60% for the total sample. Of these last two, RECREATIONAL ACTIVITIES were more important for those planning to remain for practice (75%R) and those who were undecided on practice location (69.6%R) than for those leaving Louisiana to practice (45.6%R). FINANCIAL OPPORTUNITIES also rated a higher ranking from those remaining and those undecided on practice location. It rated 76.2%R for those undecided, 69.4%R for those remaining and only 36.7%R for those leaving. Other areas of major difference were NON-PROFESSIONAL FAMILY TIES and JOINING PRACTICE OF FRIEND OR FAMILY. Both of these factors were most important for those remaining for practice and least important for those who were undecided. This table indicates that the first five factors are important to all three groups: those remaining, those leaving, and those undecided. These factors relate to individual taste and can be found in Louisiana or out of Louisiana. The table also indicates the relative importance of factors to the large undecided group. The factors may be especially significant in aiding development of measures to attract this particular group of physician trainees to Louisiana.

The information concerning postgraduate physician trainees is included in the rest of the tables. This includes interns, residents, final year residents, and family practice residents.

TABLE 25

TYPE OF PRACTICE PREFERRED BY SENIOR MEDICAL STUDENTS, INTERNS, 1ST YEAR RESIDENTS, FINAL YEAR RESIDENTS, AND FAMILY PRACTICE RESIDENTS

	Senior Medical Students	Interns	Residents	Final Year Residents	Family Practice	Total
Solo	17	3	5	20	0	45
Partnership	83	9	22	20	2	136
Association	25	5	2	5	0	37
Single Disciplinary Group	37	14	4	8	2	65
Multispecialty Group	35	14	7	10	2	68
Government Service	4	0	3	0	0	7
Undecided	35	9	18	1	2	65
Other	7	0	5	13	0	25
Total	243	54	66	77	8	448

TABLE 26

DESIRED COMMUNITY SIZE FOR FUTURE PRACTICE BY SENIOR MEDICAL STUDENTS, INTERNS, FIRST YEAR RESIDENTS, AND FINAL YEAR RESIDENTS

	Metropolitan	Small City	Rural	Undecided	Total
Senior Medical Students	126	88	13	16	243
LSU New Orleans	76	40	4	4	124
LSU Shreveport	10	12	1	4	27
Tulane	40	36	8	8	92
Interns	23	12	6	13	54
First Year Residents	25	19	0	22	66
Senior Year Residents	56	11	7	3	77
Family Practice	3	5	0	0	8
Total	233	135	26	54	448

Table 25, Type of Practice Preferred by Senior Medical Students, Interns, First Year Residents, Final Year Residents and Family Practice Residents, shows a strong preference by most physicians towards group practice type situations. In this case, group practice means partnership,association, single disciplinary group, or multi-specialty group. When this table is compared with Table 26, Desired Community Size for Future Practice by Senior Medical Students, Interns, First Year Residents and Final Year Residents, it is discovered that very few of the physicians trained in Louisiana intend to enter into a rural practice. One good reason may be the lack (either actual or perceived) of available group practices in the rural areas. Caution should be taken when examining Table 26, due to the fact that many physicians who practice in small cities serve rural populations. It does seem significant, though, that very few Louisiana trained physicians envision themselves as entering into a rural medical practice. In Louisiana's 42 rural parishes one-ninth of the state's physicians service one-third of the state's population. In addition the majority of physicians in these rural parishes are general practitioners, and the median age for GP's in Louisiana is 5 years above that for the rest of medical specialties.*

Table 27, Future Practice Location by First Year Residents, Final Year Residents and by Specialty, and Table 28, Future Practice Location by Interns and Family Practice Residents, shows where the sample of 54 interns, 66 first year residents and 77 final year residents as well as 8 family practice residents planned to establish practice. These totals are all adjusted. Appropriate adjust-

---

* Community Data Profile Center, USPHS, 1970

TABLE 27

FUTURE PRACTICE LOCATION BY FIRST YEAR RESIDENTS, FINAL YEAR RESIDENTS, AND BY SPECIALTY

	1st Year Residents	Final Year Residents
Medical Specialties	13	16
Leaving Louisiana for Practice	2	2
Remaining	6	11
Undecided	5	3
Surgical Specialties	33	36
Leaving Louisiana for Practice	6	8
Remaining	9	21
Undecided	18	7
Other Specialties	20	25
Leaving Louisiana for Practice	3	6
Remaining	7	19
Undecided	10	0
Total	66	77
Leaving Louisiana for Practice	11	16
Remaining	22	51
Undecided	33	10

TABLE 28

FUTURE PRACTICE LOCATION BY INTERNS AND FAMILY PRACTICE RESIDENTS

	Leaving Louisiana for Practice	Remaining in Louisiana for Practice	Undecided	Total
Interns	12	14	28	54
Family Practice Residents	0	7	1	8

ments were necessary due to the fact that a one-third sample and a one-half sample was selected of interns and first year residents from Charity Hospital and Ochsner Clinic respectively. A full 100% sample of interns and first year residents was taken from Confederate Memorial Hospital. In the case of final year residents, full samples were taken from Ochsner and from Confederate Memorial in Shreveport and a one-third sample was selected from Charity Hospital in New Orleans.

It is interesting to note that a large number of interns and first year residents were undecided on whether they would practice in Louisiana or elsewhere. This corresponds to a similar percent of medical students who were undecided. Most final year residents,however, had decided by the time of the interview. This seems to indicate that decisions as to practice location tend to occur late in the training programs. It should be noted here that the large number of final year residents indicated as remaining in Louisiana in Table 27 should not be over-interpreted as being significant since by the time of the interview a large percentage of the final year residents had already left the state and were not returning.

Table 30, Ranked Factors Influencing Training Location by Interns, First Year Residents, and Final Year Residents, is a summary of Table 29, Factors Influencing Decision of Postgraduate Medical Training Location by Interns, First Year Residents, Final Year Residents, Family Practice Residents, and by Medical Specialty Where Applicable. In the total column of Table 30, it can be seen that REPUTATION OF PROGRAM OR DIRECTOR and GEOGRAPHIC LOCATION were by far the two most important factors influencing training location. Following that, PRESTIGE OF INSTITUTION, IMPRESSED WITH STAFF and

TABLE 29

FACTORS INFLUENCING THE DECISION OF POSTGRADUATE MEDICAL TRAINING LOCATION BY INTERNS, FIRST YEAR RESIDENTS, FINAL YEAR RESIDENTS, FAMILY PRACTICE RESIDENTS & BY MEDICAL SPECIALTY WHERE APPLICABLE

	# Interviewed	Adjusted # Interviewed	# Married	# With Children	Reputation of Program or Director	Prestige of Institution	Impressed With Staff	Impressed With Facilities	Geographic Location	Recreational Facilities	Cultural Resources	Salary	Spouse Working Here	Job Opportunities for Spouse	Other Economic Reasons	Did Not Wish to Move Family	Family Nearby	Good Education for Children	Change of Scenery	Other
Interns	30	54	37	14	230	210	180	180	350	135	95	0	110	130	110	20	105	30	95	170
First Year Residents	39	66	52	35	560	300	280	265	425	225	215	15	70	105	110	135	85	155	155	160
Medical Specialties	6	13	9	3	80	40	50	60	70	50	50	10	30	30	5	5	20	10	20	30
Surgical Specialties	23	33	26	17	290	125	160	115	235	110	65	5	10	15	60	55	55	75	90	70
Other Specialties	10	20	17	15	190	135	70	90	120	65	100	0	30	60	45	75	10	70	45	60
Final Year Residents	43	77	61	58	585	305	315	190	455	115	170	20	40	40	110	200	235	115	50	0
Medical Specialties	10	16	13	11	105	50	45	10	105	30	20	0	25	25	0	80	35	0	5	0
Surgical Specialties	22	36	36	35	245	185	120	130	165	75	110	5	15	15	75	60	90	95	45	0
Other Specialties	11	25	12	12	235	70	150	50	185	10	40	15	0	0	35	60	110	20	0	0
Family Practice Residents	8	8	6	3	35	40	55	80	50	25	5	20	5	15	20	20	15	5	10	70
Total	120	205	156	110	1410	855	830	715	1280	500	485	55	225	290	350	375	440	305	310	400

TABLE 30

RANKED FACTORS INFLUENCING TRAINING LOCATION BY INTERNS, FIRST YEAR RESIDENTS AND FINAL YEAR RESIDENTS

	Total		Interns		First Year Residents		Final Year Residents	
	Rank	Per Cent	Rank	Per Cent	Rank	Per Cent	Rank	Per Cent
Reputation of Program or Director	1	68.8	2	42.6	1	84.8	1	76.0
Geographic Location	2	62.4	1	64.8	2	64.4	2	59.1
Prestige of Institution	3	41.7	3	38.9	3	45.5	4	39.6
Impressed with Staff	4	40.5	4-5	33.3	4	42.4	3	40.9
Impressed with Facilities	5	34.9	4-5	33.3	5	40.2	7	24.7
Recreational Activities	6	24.4	6	25.0	6	34.1	9-10	14.9
Cultural Resources	7	23.7	11-12	17.6	7	32.6	8	22.1
Family Nearby	8	21.5	10	19.4	13	12.9	5	30.5
Did Not Wish to Move Family	9	18.3	14	3.7	10	20.5	6	26.0
Other Economic Reasons	10	17.1	8-9	20.4	11	16.7	11	14.3
Change of Scenery	11	15.1	11-12	17.6	8-9	23.5	12	6.5
Good Education for Children	12	14.9	13	5.6	8-9	23.5	9-10	14.9
Job Opportunities for Spouse	13	14.1	7	24.1	12	15.9	13-14	5.2
Spouse Working Here	14	11.0	8-9	20.4	14	10.6	13-14	5.2
Salary	15	2.7	15	0.0	15	2.3	15	2.6

BEST COPY AVAILABLE

IMPRESSED WITH FACILITES were fairly important but not nearly as important as the first two. A major difference between the interns, first year residents, and final year residents exists for the factor, REPUTATION OF PROGRAM OR DIRECTOR. While this ranked second with interns, it only received 42.6%R as compared with 84.8%R for first year residents and 76.0%R for final year residents. The factor IMPRESSED WITH FACILITIES was far less significant for final year residents than the other two postgraduate groups. Hindsight may be the case with RECREATIONAL ACTIVITIES which also was far less important for final year residents, although it did not seem to be extremely important for any group. CULTURAL RESOURCES held little importance for interns and greater importance for first year residents and final year residents. FAMILY NEARBY was far more important for final year residents than it was for interns or first year residents. This may indicate a general trend developing over the past five years. DID NOT WISH TO MOVE FAMILY was of relatively insignificant value to interns and was slightly more important to first year residents and final year residents. JOB OPPORTUNITIES FOR SPOUSE and SPOUSE WORKING HERE were unimportant for all three groups but when adjusted for those married assumed a more significant amount of importance. The degree of importance decreases from interns to first year residents to final year residents indicating that by the time a physician reaches his final year of residency he probably stops depending on his spouse for earning part of the family income. This is probably partially due to the fact that most of the married final year residents do have children.

Table 31 is titled Perceived Strengths of Postgraduate Medical

TABLE 31

PERCEIVED STRENGTHS OF POSTGRADUATE MEDICAL TRAINING PROGRAMS IN LOUISIANA BY INTERNS, FIRST YEAR RESIDENTS, FINAL YEAR RESIDENTS, FAMILY PRACTICE RESIDENTS, AND BY MEDICAL SPECIALTY WHERE APPLICABLE

	Number Interviewed	Adjusted Number Interviewed	Coordination of Departments	Homogeneous Patient Population	Heterogeneous Patient Population	Variety of Clinical Experience	Large Volume of Clinical Experience	Salary	Opportunity to Exercise Independent Judgement	Excellence of Supervision	Relationship With Teaching Staff	Contact With High Level Teaching Staff	Excellence of Fellow Residents	High Quality Support Services	Hours of Work	Good Schedule Nights-On-Call	University Connection	Opportunity for Independent Research	Highly Organized Educational Programs	Loosely Organized Educational Programs	Living Facilities	Moonlighting Opportunities	Potential for Eventual Practice Location
Interns	30	54	15	10	17	52	44	2	49	18	34	24	41	10	14	35	34	6	24	11	3	29	20
First Year Residents	39	66	26	6	21	62	60	1	56	46	50	44	49	28	33	40	31	19	21	11	8	38	22
Medical Specialties	6	13	6	0	2	13	13	0	13	13	13	13	6	4	4	8	4	3	3	3	5	8	6
Surgical Specialties	23	33	9	3	11	31	31	1	30	21	23	18	25	13	15	18	19	9	13	3	0	20	7
Other Specialties	10	20	11	3	8	18	16	0	13	12	14	13	18	11	14	14	8	7	5	5	3	10	9
Final Year Residents	43	77	24	11	17	75	71	6	68	47	51	55	66	28	30	46	49	23	23	11	0	33	41
Medical Specialties	10	16	8	1	3	16	14	0	16	9	13	13	12	6	8	11	11	2	5	1	0	5	10
Surgical Specialties	22	36	11	9	4	34	35	0	31	21	21	25	34	13	14	18	21	13	9	10	0	21	18
Other Specialties	11	25	5	1	10	25	22	6	21	17	17	17	20	9	8	17	17	8	9	0	0	7	13
Family Practice Residents	8	8	7	1	3	8	6	2	7	5	7	4	7	6	4	6	4	1	1	1	8	8	6
Total	120	205	72	28	58	197	181	11	180	116	142	127	163	72	81	127	118	49	69	34	19	108	89

BEST COPY AVAILABLE

TABLE 32

PERCEIVED WEAKNESSES OF POSTGRADUATE MEDICAL TRAINING PROGRAMS IN LOUISIANA BY INTERNS, FIRST YEAR RESIDENTS, FINAL YEAR RESIDENTS, FAMILY PRACTICE RESIDENTS, AND BY MEDICAL SPECIALTY WHERE APPLICABLE

	Number Interviewed	Adjusted Number Interviewed	Lack of Department Coordination	Homogeneous Patient Population	Heterogeneous Patient Population	Lack of Variety of Clinical Experience	Small Volume of Clinical Experience	Salary	Not Enough Opportunity to Exercise Independent Judgement	Lack of Supervision	Poor Relationship With Teaching Staff	Lack of Contact With High Level Teaching Staff	Lack of Excellence in Fellow Residents	Low Quality Support Services	Hours of Work	Poor Schedule of Nights-on-Call	Excessive Scut Work	Compulsory Scut Level Research	Highly Organized Educational Program	Loosely Organized Educational Program	Living Facilities Not Available	No Moonlighting Opportunities	Lack of Potential for Eventual Practice Location
Interns	30	54	29	15	0	0	2	37	1	20	3	10	4	25	3	3	10	1	0	11	4	0	6
First Year Residents	39	66	21	15	0	0	0	46	1	13	3	10	7	12	6	7	12	3	2	17	0	2	8
Medical Specialties	6	13	3	6	0	0	0	9	0	0	0	0	3	6	4	2	6	0	0	0	0	0	2
Surgical Specialties	23	33	11	6	0	0	0	27	1	5	3	6	2	3	2	2	6	3	2	7	0	2	3
Other Specialties	10	20	7	3	0	0	0	10	0	8	0	4	2	3	0	3	0	0	0	10	0	0	3
Final Year Residents	43	77	47	28	0	1	3	56	6	22	18	16	3	48	9	10	23	4	7	27	12	5	4
Medical Specialties	10	16	8	9	0	0	0	12	1	4	3	3	2	9	1	1	3	4	1	9	6	1	0
Surgical Specialties	22	36	19	9	0	1	0	29	2	10	7	6	0	23	8	9	14	0	0	11	3	1	1
Other Specialties	11	25	20	10	0	0	3	15	3	8	8	7	1	16	0	1	6	0	6	7	3	3	3
Family Practice Residents	8	8	1	1	2	0	1	4	1	2	1	2	0	2	1	2	1	1	0	4	0	0	0
Total	120	205	98	59	2	1	6	143	9	57	25	38	14	87	19	22	46	9	9	59	16	7	18

BEST COPY AVAILABL

Training Programs in Louisiana by Interns, First Year Residents, Final Year Residents, Family Practice Residents, and by Medical Specialty Where Applicable. It can be seen from Table 31 that the most significant strength of Louisiana's residency programs are the VARIETY OF CLINICAL EXPERIENCE, LARGE VOLUME OF CLINICAL EXPERIENCE, OPPORTUNITY TO EXERCISE INDEPENDENT JUDGMENT and EXCELLENCE OF FELLOW RESIDENTS. Other important strengths are RELATIONSHIP OF TEACHING STAFF, GOOD SCHEDULE OF NIGHTS ON CALL, CONTACT WITH HIGH LEVEL TEACHING STAFF, UNIVERSITY CONNECTIONS, and EXCELLENCE OF SUPERVISION. It should be noted that interns did not rate highly EXCELLENCE OF SUPERVISION as a strength, while residents did. This is also somewhat true of CONTACT WITH HIGH LEVEL TEACHING STAFF. The lowest scoring strength on Table 31 is SALARY. The six final year residents to rate SALARY as a strength were in psychiatry at Charity Hospital.

Table 32, Perceived Weaknesses of Postgraduate Medical Training Programs in Louisiana by Interns, First Year Residents, Final Year Residents, Family Practice Residents and by Medical Specialty Where Applicable, is similar to Table 31. The interviewee was asked to rate the various choices given in Table 32 as weaknesses. By far the largest weakness was SALARY. 69.8% of the interns and residents rated salary as a weakness. The next closest weakness was LACK OF COORDINATION IN DEPARTMENT. 47.8% of the interns and residents ranked it as a weakness. The only other factor which might be considered to be significant as a weakness was LOW QUALITY SUPPORT SERVICES. It is interesting though to examine the strength table in light of the weaknesses table and see that a fairly large

BEST COPY AVAILABLE

TABLE 33

FACTORS INFLUENCING THE DECISION OF FUTURE PRACTICE LOCATION BY SENIOR MEDICAL STUDENTS, INTERNS, FIRST YEAR RESIDENTS, FINAL YEAR RESIDENTS, FAMILY PRACTICE RESIDENTS, AND BY FUTURE PRACTICE LOCATION

	Total Interviewed	Adjusted Total	Number Married	With Children	Recreational Activities	Joining Practice of Friend or Family	Non-professional Family Ties	Healthy Climate to Raise Children	Educational Opportunities for Children	Attraction of Location for Spouse	Desire to Remain in Academia	Favorable Climate	Desired Community Size	Most Favorable Geographic Area of Location	Financial Opportunities	Cultural Resources	Favorable Hospital Affiliation	Need for Specialty in Community	Favorable Professional Climate	Availability of Allied Health Personnel
Senior Medical Students	81	243	156	40	1545	535	790	1875	1640	1205	1125	1600	2000	1760	1485	1315	380	760	330	50
Leaving	22	79	55	9	360	145	240	545	445	380	335	420	595	545	290	390	90	200	90	10
Remaining	29	80	52	18	600	240	335	660	545	395	420	545	675	565	555	415	130	240	110	40
Undecided	30	84	49	13	585	150	215	670	650	430	370	635	730	650	640	510	160	320	130	0
Interns	30	54	37	14	320	70	225	405	405	355	200	285	445	335	365	280	140	110	50	20
Leaving	3	7	4	0	65	0	25	55	50	40	10	20	60	60	40	35	0	30	0	0
Remaining	10	15	13	6	70	40	120	95	95	90	40	55	140	110	115	50	70	50	20	0
Undecided	17	32	20	8	190	30	80	255	260	225	150	210	245	195	210	195	70	30	30	20
First Year Residents	39	66	52	35	400	125	265	505	510	430	300	455	490	365	355	370	100	100	110	20
Leaving	3	6	6	3	50	30	45	60	60	60	25	50	60	50	20	20	0	0	0	0
Remaining	10	16	15	9	75	60	125	115	110	110	50	75	135	90	110	80	10	30	0	0
Undecided	26	44	31	23	275	35	95	330	340	260	225	330	295	225	265	270	90	70	110	20
Final Year Residents	43	77	61	58	410	245	370	540	430	360	460	435	485	475	470	315	50	230	60	10
Leaving	12	16	15	14	85	30	15	140	115	75	65	140	135	125	95	65	20	60	60	0
Remaining	25	51	36	34	290	180	325	305	215	220	335	230	390	305	295	200	20	120	0	10
Undecided	6	10	10	10	35	35	30	95	100	75	60	65	95	45	80	50	10	50	10	0
Family Practice Residents	8	8	6	3	55	20	45	60	50	55	30	45	75	50	50	30	0	10	40	0
Leaving	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Remaining	7	7	6	3	45	20	45	50	40	45	25	45	65	45	45	20	0	10	30	0
Undecided	1	1	0	0	10	0	0	10	10	10	5	0	10	5	5	10	0	0	10	0

TABLE

RANKED FACTORS INFLUENCING PRACTICE LOCATIONS OF ALL POSTGRADUATE TRAINEES BY PRACTICE LOCATION

	Total		Leaving		Remaining		Undecided	
	Rank	Per Cent	Rank	Per Cent	Rank	Per Cent	Rank	Per Cen
Healthy Climate to Raise Children	1	73.7	1-2	87.9	3-4	63.5	2	79.3
Desired Community Size	2	72.9	1-2	87.9	1	82.0	7	58.6
Educational Opportunities for Children	3	68.0	4	77.6	8	51.7	1	81.6
Financial Opportunities	4	60.5	8	53.4	3-4	63.5	6	59.8
Most Favorable Geographic Area of Location	5	59.8	3	81.0	5	61.8	9	50.6
Favorable Climate	6	59.5	5	72.4	10	45.5	3	69.5
Attraction of Location for Spouse	7	58.5	7	60.3	7	52.2	4	64.4
Recreational Activities	8	57.8	6	69.0	6	53.9	8	58.0
Cultural Resources	9	48.5	10	41.4	11	39.3	5	60.3
Desire to Remain in Academia	10	48.3	9	44.8	9	50.6	10	47.1
Non-Professional Family Ties	11	44.1	11	29.3	2	69.1	11	23.6
Joining Practice of Friend or Family	12	22.4	12	20.7	12	33.7	12	11.5

BEST COPY AVAILABLE

number of interns and residents rated HIGH QUALITY SUPPORT SERVICES and COORDINATION OF DEPARTMENTS as strengths. A complaint that was fairly frequently volunteered as a weakness was lack of equipment. This was particularly true of trainees at one of the three major hospitals. Since this was not a choice given to the interviewee it is not included in either the strength or the weakness tables.

Table 33 is titled Factors Influencing the Decision of Future Practice Location by Senior Medical Students, Interns, First Year Residents, Final Year Residents, Family Practice Residents, and by Future Practice Location. Table 34, Ranked Factors Influencing Practice Locations of all Postgraduate Trainees by Practice Location, is a summary of Table 33, excluding senior medical students. This was done because information concerning senior medical students has been presented previously. The total column of Table 34 gives the rank and percent out of a possible 100%R that each factor received for interns, first year residents and final year residents. The first eight factors: HEALTHY CLIMATE TO RAISE CHILDREN, DESIRED COMMUNITY SIZE, EDUCATIONAL OPPORTUNITIES FOR CHILDREN, FINANCIAL OPPORTUNITIES, MOST FAVORABLE GEOGRAPHIC AREA OF LOCATION, FAVORABLE CLIMATE, ATTRACTION OF LOCATION FOR SPOUSE and RECREATIONAL ACTIVITIES are the most important to all three groups. The least important factor is JOINING THE PRACTICE OF A FRIEND OR FAMILY. In comparing the difference between those leaving Louisiana for practice, those remaining for practice and those who are undecided, it can be seen that DESIRED COMMUNITY SIZE is not as important for those who are undecided as for those remaining and leaving; however, it is still an important factor, ranking more than 58%R EDUCATIONAL OPPORTUNITIES FOR CHILDREN seems less important for those remaining than those leaving or those undecided. Again, though, it still ranks over 51%R for all three groups. FAVORABLE CLIMATE is least important to those remaining and does drop to 45.5%R. CULTURAL RESOURCES is far more important to the undecided group than the group remaining or the group leaving. Finally, NON-PROFESSIONAL FAMILY TIES, as would be expected, was more important to those remaining than either those leaving or those undecided even though it was not as important on an overall basis. Those physicians planning to remain in Louisiana ranked it #2 overall and rated it 69.1%R.

Table 35, Ranked Factors Influencing Practice Locations by Interns, First Year Residents and Final Year Residents, is also a summary of Table 33. Here, the columns have been arranged according to interns, first year residents,and final year residents. There were only three significant differences in this table. The first is the factor, EDUCATIONAL OPPORTUNITIES FOR CHILDREN. This seems far less important to final year residents than either interns or first year residents but it still rates above 50%R. Similarly, ATTRACTION OF LOCATION FOR SPOUSE, is also less important for final year residents, rating at 46.8%R, while above 65%R for both interns and first year residents. DESIRE TO REMAIN IN ACADEMIA is relatively unimportant for interns and first year residents and extremely important for final

TAB 35

RANKED FACTORS INFLUENCING PRACTICE LOCATION BY INTERNS, FIRST YEAR RESIDENTS AND FINAL YEAR RESIDENTS

	Total		Interns		First Year Residents		Final Year Residents	
	Rank	Per Cent	Rank	Per Cent	Rank	Per Cent	Rank	Per Cent
Healthy Climate to Raise Children	1	73.7	2-3	75.0	2	76.5	1	70.1
Desired Community Size	2	72.9	1	82.4	3	74.2	2	63.0
Educational Opportunities for Children	3	68.0	2-3	75.0	1	77.3	7	55.8
Financial Opportunities	4	60.5	4	67.6	9	53.8	4	61.0
Most Favorable Geographic Area of Location	5	59.8	6	62.0	8	55.3	3	61.7
Favorable Climate	6	59.5	8	52.8	4	68.9	6	56.5
Attraction of Location for Spouse	7	58.5	5	65.7	5	65.2	10	46.8
Recreational Activities	8	57.8	7	59.3	6	60.6	8	53.2
Cultural Resources	9	48.5	9	51.9	7	56.1	11	40.9
Desire to Remain in Academia	10	48.3	11	37.0	11	45.5	5	59.7
Non-Professional Family Ties	11	44.1	10	41.7	10	40.2	9	48.1
Joining Practice of Friend or Family	12	22.4	12	13.0	12	18.9	12	31.8

BEST COPY AVAILABLE

year residents. There is a gradual increase from interns to first year residents to final year residents, indicating either that the closer a physician in training comes to actual medical practice, the greater the desire to remain connected with academia, or a general changing trend over time in the attitude of groups of medical school graduates. A final note of interest on Table 35 is the factor JOINING PRACTICE OF FRIEND OR FAMILY. This gradually increases from interns to first year residents and then sharply increases for final year residents although it never achieves a high rating from any group. The increase is probably related to more people having made decisions concerning their plans for practice as final year residents.

A further examination of both factors influencing practice location and factors influencing training location by specialty is desirable; however, this was not done due to a feeling by the staff that the sample size in these individual specialty categories might not be large enough. This will be an area for future examination. Family practice residents were not included in any of the summary tables and were not mentioned in describing any of the other tables because of their small number.

In addition to tabular data, certain questions of a more general nature were asked of senior medical students and postgraduate trainees. One of these questions covered the subject of "location of practice services." Almost all of the medical students and interns knew nothing of either the AMA location service or the State Medical Society location service. Interest was expressed by several of the interviewees regarding such services. Residents were unaware of the location services, but a larger percentage than students and interns were aware of and had used the AMA service.

DISCUSSION

The first point to be discussed is the overall need for physicians in Louisiana in 1982. The estimates in Table 1 were meant to give a rough picture of overall trends, not accounting for specialty distribution and geographic distribution in the state. Although this type of data should lead to very limited interpretation, it is felt that it indicates there is indeed developing a significantly increased need for physician services and/or their equivalent.

In the physician manpower production process there are three major areas where input modifications can occur: admissions to medical school, attracting physicians for postgraduate training and attracting physicians for final practice location. Using present information (including gross estimates of the necesasry components for projection) the effects of various inputs at these areas are illustrated.

Among other things, these illustrations demonstrated that different actions carry with them different [illegible]vels of expense, chances of overproduction, time lags, and other practical considerations. It should also be obvious that the various actions to be taken fall under the responsibilities of different agencies or institutions and that the actions of these groups should be coordinated. The Committee responsible for this study could indeed be the mechanism for such coordination.

When the gross estimates are compared with the new information available in the AMA tapes, it was found that the estimate used for percentage of Louisiana graduates remaining in the state for practice was indeed reasonable and in fact this percentage has been increasing (see Table 9). It was also found that up to 1960 the estimate for those coming to Louisiana to practice was probably satisfactory, although since that time there has been an increase. There is some evidence (see Tables 9 and 10) that Louisiana has been more attractive to both its own graduates and to outside physicians since 1960. It would be important to know whether the physicians coming from out-of-state were attracted before of after postgraduate training. This information should become available from the additional AMA computer tape.

In our survey of senior medical students it was seen that 50% of those who have decided upon location for practice are at the present time planning to stay in Louisiana (Table 18). This compares favorably with the 43% in Table 9. The important fact, as would be expected, is that over one-third of the students have yet to indicate any preference (Table 18). It should also be noted that in our sample, none of the students admitted to medical schools in Louisiana from other states were planning to stay in Louisiana for practice. Of those students accepted from Louisiana, 52.6% are planning to stay in Louisiana for practice and 38.2% are still undecided (see Table 18).

As mentioned earlier, it would be important to evaluate our need for physician services in terms of specific medical specialties. From Table 4 the preliminary data indicate varied levels of need among specialties. The most important piece of information gained by this analysis was the delineation of the problem Louisiana faces in the area of primary care.

To get an in-depth evaluation of the physician manpower production process as it relates to the primary care area would take further information describing more specifically the post-graduate portion of the process. As stated before, the data are not available at this time.

It can be seen from the AMA data that although Louisiana graduates a high percentage of physicians who are in patient care and indeed imports most of its physicians needed for research and teaching, these physicians that Louisiana medical schools graduate are showing a decreasing interest in primary care. Their interest seems to be centered mainly on the surgical specialties.

Table 20 developed from the interviews with senior medical students indicates that while the students believe that the overall influence of medical school experiences towards primary care was favorable, those planning to enter the primary care areas (particularly internal medicine) were being attracted to locations outside Louisiana. The data from the AMA tapes in Table 15 indicate that in 1960-64 the total number of medical specialty physicians locating in the state remained the same due only to an increase in those locating here from outside the state. This finding appears to be due to a decrease both in the production and in numbers retained of medical specialists graduating from Louisiana medical schools.

A different trend appears to be true in the area of general practice where the retention of Louisiana graduates has increased but the total number in Louisiana has decreased because the total number entering the field has been rapidly decreasing.

In Table 6 our major lack of capacity for production in terms of terminal year resident positions is in the area of primary care.

To get a better understanding of the relationship of our capacity for production to actual production, information concerning the number of residency positions filled by specialty is needed. Also desirable would be information on the number of resident positions filled by foreign graduates since few remain in Louisiana for practice. These data are not available for consideration at this time.

Although we realize that opinions given are not always the true reasons for actions taken, we feel the surveys of senior medical students, interns and residents do give some indications of the basis for their decisions regarding training and practice locations. As a result, some special emphasis should be placed on the interpretation of the interviews.

The major influencing factors, geographic location and prestige items,are important for all groups, whether remaining or leaving for training (Table 30). The major factor differing between those remaining and those leaving for training is salary, which is extremely low in Louisiana. The importance of this factor is confirmed by the fact that those leaving the state for training rated it extremely high and those remaining for training (including interns and residents) gave it their lowest rating of all factors influencing training locations (Tables 22 and 30). In addition, interns and residents rated salary as the major weakness in their postgraduate medical training programs.

Strengths listed by the interns and residents reflected the types of hospitals offering residencies in Louisiana. Large volume and variety of clinical experience with its concomitant physician trainee responsibilities were the highest rated strengths (Table 31).

For senior medical students, interns and residents, quality of life factors (e.g., EDUCATIONAL OPPORTUNITIES FOR CHILDREN, RECREATIONAL ACTIVITIES, HEALTHY CLIMATE TO RAISE CHILDREN) are the most important factors concerning practice location regardless of whether the future practices were in or out of Louisiana (Tables 23 and 33). Of the two major differences between those remaining and those leaving, family ties were extremely important to those remaining. Financial opportunities were unimportant only to senior medical students who were leaving Louisiana for practice.

Other factors that should be considered important in selecting practice locations include type of practice and size of community (Tables 25 and 26). Group practice was the overwhelming choice of all trainees in terms of the type of practice desired. The preference of practice location in metropolitan and small city areas tended to reflect general population trends (maldistribution in rural areas is evident) among answers indicated by senior medical students, interns and first year residents. The percentage shifted sharply to metropolitan practice locations among final year residents. It would be important to know whether this increase represents the feelings of an unusual group, a terminal group before the beginning or a new trend, or a change in decision late in residency training. Support for this last alternative exists in Table 27 and from the literature which indicate decisions regarding location of practice occurs late in the residency period.

SUMMARY AND RECOMMENDATIONS

In summary, this report has indicated that Louisiana is facing several significant manpower production problems in its preparation for the physician services it needs in 1982, e.g., the predicted shortage of physician services and/or their equivalent in the area of primary care. The reasons why a statewide planning program is needed to face these problems were delineated. The report has illustrated the need for more specific information to be brought to bear on these problems before practical effective modification in the physician manpower production process can be recommended.

The committee, after reviewing the body of this report, felt that the following conclusions warranted special consideration:

1. The number of attractive, high-quality primary care residency positions in the areas of family practice, internal medicine, and pediatrics, exclusive of subspecialization, should be increased and modified to meet the needs for potential trainees entering the area of primary care. This could include such measures as studying the correlation between demand for and availability of residency positions, determining the need for institutional and non-institutional training settings, developing permanent methods of financing such training, and improving salary incentives.

2. Information regarding primary care practice opportunities in Louisiana should be made available:

    a) to those physicians training for primary care specialties in Louisiana training instutions

    b) to those physicians who graduated from Louisiana medical schools and who are receiving training in the area of primary care elsewhere.

c) to medical students training in Louisiana medical schools.

It is already understood that some information of this type is available through the Louisiana State Medical Society and the American Medical Association. Methods should be developed to improve dissemination of this information to the groups mentioned above.

3. The report indicates that there is an essential need for further analysis of variations in the physician manpower production process over time and by specific specialty. Such analysis is planned when the third AMA tape on Interns and Residents trained in Louisiana becomes available, hopefully in the summer of 1973. (A copy of this report justifying the need for this tape is being forwarded to the American Medical Association's Department of Survey Research.)

4. Further studies are needed to determine what factors influence the decision to practice in Louisiana and how these factors can be related to the three major points of input in the physician manpower production process: admission to medical school in Louisiana, decision to pursue postgraduate training in Louisiana, and decision to locate practice in Louisiana.

5. Studies are needed to determine positive and negative factors which influence the choice to specialize in the primary care area and to determine how the medical schools can use these factors to increase interest in primary care practice.

6. Studies are needed to determine factors which tend to encourage subspecialization by physicians in the primary care area and see if these can be modified to limit the number of physicians doing so.

7. Studies are needed to examine the geographic distribution

of physician services by specialty in Louisiana and to determine areas of need.

8. The record capabilities of hospitals conducting residency programs must be improved in areas such as:

a) number of positions offered by specialty

b) number of positions filled by specialty

c) number of positions filled by foreign medical graduates by specialty, and

d) eventual practice location of graduate trainees.

The Committee developed and approved a set of recommendations based on the data presented in the report:

1. The Committee presently involved in the study shall continue its activities in this area and serve as the mechanism for a cooperative program of action.

2. The Committee shall utilize appropriate outside expertise to help in the evaluation of each conclusion, to develop recommendations, and to determine the proper agencies to involve in the implemntations of these specific recommendations.

3. The Committee shall seek financial support from the state to continue the study of Louisiana's physician manpower needs.

4. The Committee shall seek financial assistance from the Bureau of Health Manpower Education and any other appropriate federal agency to supplement local financial resources mentioned above in order to expand the data and to implement specific recommendations that will be developed.

FOOTNOTES

1. J. N. Haug, G. A. Roback, and B. C. Martin, *Distribution of Physicians in The United States, 1970*, Center for Health Services, Research and Development, American Medical Association, Chicigo, 1971.

2. *Health Manpower Perspective: 1967*, Bureau of Health Manpower, U.S. Department of Health, Education, and Welfare Washington; 1967, p.9.

3. Roger L. Burford and Sylvia G. Murzyn, *Population Projections by Age, Race, and Sex for Louisiana and its Parishes 1970-1985,* Occasional Paper Number 10, Division of Research, College of Business Administration, Louisiana State University, Baton Rouge, Louisiana, June, 1972.

4. *Current Estimates from the Health Interview Survey, United States-1970*, U.S. Department of Health, Education, and Welfare, Vital and Health Statistics, Series 10, Number 72, p. 25.

5. *Age Patterns in Medical Care, Illness, and Disability, United States, 1968-1969*, U.S. Department of Health, Education, and Welfare, Vital and Health Statistics, Series 10, Number 70, p. 30.

6. G. A. Roback, *Distribution of Physicians in the United States, 1971*, Center for Health Services, Research and Development, American Medical Association, Chicago; 1972. Interns, Residents, and inactive physicians are omitted from the physician population as of December 31, 1971.

7. J. N. Haug, G. A. Roback and B. C. Martin, *op. cit*.

8. H. R. Mason, "Manpower Needs by Specialty, " *Journal of the American Medical Association*, Vol. 219, No.12, March 20, 1972, p. 1621.

9. *Journal of the American Medical Association*, Education Number.

10. C.H. William Ruhe, M.D., Willard V. Thompson, M.D. George Mixter,Jr.,M.D., Martin Putnoi, M.D., Cameron Brown, and Rose Tracy, M.B.A., *Directory of Approved Internships and Residencies 1971-72*, American Medical Association, 1971, p. 24.

APPENDIX

A Description of the AMA's M.D. Master Record

1. Medical Education Number
    a. State or country of medical education
    b. Medical school of graduation
    c. Year of graduation
2. Name of Physician
3. Sex
4. Current Professional Mailing Address
5. Geographic Codes
    a. State
    b. County
    c. City
    d. Zip code
6. Birthdate
7. Birthplace
8. Citizenship or Visa Code
9. State Licensure Data
10. National Boards
11. Major Professional Activity--Type of Practice
12. Specialty
    a. Primary
    b. Secondary
    c. Tertiary
13. Present Employment
14. American Specialty Boards
15. Specialty Societies
16. Current and Former Medical Training
    a. Internship
    b. Residency
17. Current and Former Government Service
18. Professional Appointments

CHANGES IN COMPOSITION OF LOUISIANA'S POPULATION 1960-1980

Year	1960	1970	1980[1]
Total Population	3,257,022	3,643,180	3,954,789
Percent Increase From Previous Census	21.4%	11.9%	8.6%
White	67.9%	69.8%	71.0%
Nonwhite	32.1%	30.2%	29.0%
Male	48.9%	48.6%	48.5%
Female	51.1%	51.4%	51.5%
Under 18	40.4%	38.1%	32.8%
18 - 64	52.2%	53.3%	57.6%
65 and over	7.4%	8.4%	9.6%

---

[1] Burford, Roger L. and Sylvia G. Murzyn, *Population Projections by Age, Race, and Sex for Louisiana and its Parishes 1970 - 1985,* Occasional Paper Number 10, Division of Research, College of Business Administration, Louisiana State University, Baton Rouge, La., June, 1972.

NUMBER OF PHYSICIAN VISITS PER PERSON PER YEAR, 1969*

Characteristic	All Ages	Under 17 years	17-44 years	45-64 years	65 years & over
	Number of visits per person per year				
All persons	4.3	3.6	4.2	4.7	6.1
Sex					
Male	3.7	3.7	3.1	4.1	5.5
Female	4.7	3.4	5.1	5.2	6.6
Color					
White	4.4	3.8	4.2	4.7	6.2
All other	3.5	2.5	4.1	4.4	5.1
Family income					
Under $3,000	4.8	2.7	4.5	5.5	6.0
$3,000-$3,999	4.6	2.8	4.7	5.5	5.9
$4,000-$6,999	4.1	3.1	4.1	4.8	6.3
$7,000-$9,999	4.1	3.7	4.1	4.7	6.0
$10,000 and over	4.3	4.2	4.2	4.3	7.5
Geographic region					
Northeast	4.4	3.9	4.1	4.6	6.5
North Central	4.0	3.2	4.0	4.8	5.6
South	4.1	3.5	4.0	4.5	6.0
West	4.6	3.7	4.8	4.9	6.7
Area of residence					
SMSA	4.4	3.8	4.3	4.9	6.2
Outside SMSA:					
Nonfarm	4.0	3.2	4.0	4.5	6.2
Farm	3.1	2.3	2.6	3.7	5.6
Marital status					
All persons 17 years and over	4.6	...	4.2	4.7	6.1
Married	4.7	...	4.5	4.6	5.9
Widowed, divorced, or separated	6.0	...	5.5	5.9	6.4
Never married	3.3	...	3.2	3.5	5.9

---

* Vital and Health Statistics, Age Pattern in Medical Care, Illness, and Disability 1968-1969. U.S. Department of Health, Education, and Welfare

PERCENT DISTRIBUTION OF PHYSICIAN VISITS, 1969*

AGE AND DATE	PLACE OF VISIT				
	Total	Home	Office	Hospital Clinic	Other & Unknown
All Ages		Percent distribution			
1969	100.0	2.3	70.1	10.3	17.3
July 1963-June 1964	100.0	5.4	69.8	11.9	12.9
July 1957-June 1959	100.0	9.7	65.8	9.4	15.1
65 years and over					
1969	100.0	8.0	74.4	6.1	11.5
July 1963-June 1964	100.0	17.3	64.2	8.5	10.1
July 1957-June 1959	100.0	22.8	60.2	6.8	10.1

---

* Vital and Health Statistics, Age Pattern in Medical Care, Illness, and Disability, 1968-1969 U.S. Department of Health, Education, and Welfare.

BEST COPY AVAILABLE

AVERAGE NUMBER OF WEEKS PRACTICED PER YEAR
BY SPECIALTY AND LOCATION, 1969

		Location	
SPECIALTY	Total	Non-Metropolitan	Metropolitan
Total	48.0 (4381)	48.2	47.9
General Practice	48.1 (960)	48.4	47.9
Internal Medicine	47.8 (722)	47.7	47.8
Surgery	47.8 (1007)	48.3	47.8
Obstetrics-Gynecology	48.6 (303)	48.4	48.6
Pediatrics	48.2 (286)	48.9*	48.2
Psychiatry	47.9 (319)	48.4*	47.8
Radiology	48.4 (195)	49.6*	48.2
Anesthesiology	47.5 (182)	49.0*	47.3
Other	47.7 (407)	46.3	47.8

( ) = Number of observations

* - Based on fewer than 30 observations.

Sources: 5

AVERAGE NUMBER OF TOTAL PATIENTS VISITS PER WEEK
BY SPECIALTY AND LOCATION, 1970

		Location	
SPECIALTY	Total	Non-Metropolitan	Metropolitan
Total	132.5 (4342)	174.8	124.4
General Practice	172.9 (961)	210.8	154.0
Internal Medicine	122.6 (722)	163.9	113.7
Surgery	122.2 (994)	150.8	117.6
Obstetrics-Gynecology	132.8 (301)	149.1	130.3
Pediatrics	145.2 (282)	161.2*	143.4
Psychiatry	54.6 (317)	53.9*	54.6
Radiology	233.9 (176)	168.0*	242.9
Anesthesiology	48.4 (167)	56.5*	47.4
Other	122.7 (422)	141.4	119.9

( ) = Number of observations.

* - Based on fewer than 30 observations

Source: 5

Walsh, Robert J., Phil Aherne and George A. Ryan, *The Profile of Medical Practice*, 1972 edition, American Medical Association, Chicago, Illinois 1972.

AVERAGE NUMBER OF HOURS PRACTICED PER WEEK BY SPECIALTY AND LOCATION, 1970

		Location	
Specialty	Total	Non-Metropolitan	Metropolitan
Total	51.4 (4258)	54.2	50.8
General Practice	52.1 (928)	56.1	50.1
Internal Medicine	51.6 (693)	54.4	51.3
Surgery	53.2 (965)	54.6	53.0
Obstetrics-Gynecology	55.1 (292)	56.5	54.9
Pediatrics	51.7 (273)	54.5*	51.3
Psychiatry	47.1 (314)	46.4*	47.1
Radiology	47.4 (188)	45.7*	47.6
Anesthesiology	53.2 (173)	51.4*	53.4
Other	46.6 (432)	47.4	46.5

( ) = Number of observations

* - Based on fewer than 30 observations.

Source: 5

Walsh, Robert J., Phil Aherne and George A. Ryan, The Profile of Medical Practice, 1972 Edition, American Medical Association, Chicago, Ill., 1972

AVERAGE NUMBER OF HOURS OF DIRECT PATIENT CARE PER WEEK BY SPECIALTY AND LOCATION, 1970

		Location	
Specialty	Total	Non-Metropolitian	Metropolitan
Total	44.7 (4374)	48.9	43.9
General Practice	47.7 (954)	51.3	45.8
Internal Medicine	45.5 (721)	49.7	45.1
Surgery	47.2 (995)	49.9	46.8
Obstetrics-Gynecology	49.9 (298)	52.0	49.6
Pediatrics	45.9 (282)	49.4*	45.5
Psychiatry	37.3 (316)	33.9*	37.4
Radiology	34.5 (190)	35.5*	34.4
Anesthesiology	46.8 (180)	45.8*	46.9
Other	35.6 (438)	40.6	34.9

Footnotes same as above table

BEST COPY AVAILABLE

RESIDENCY POSITIONS OFFERED IN LOUISIANA BY SPECIALTY FOR 1970-71 AND 1972-73[1]

		No. of Residency Positions Offered in Louisiana 1972-1973 (all years)	No. Residency Positions Offered in Louisiana 1970-1971 (all years)
1.	Anesthesiology	26	26
2.	Aerospace Medicine	0	0
3.	Child Psychiatry	14	5
4.	Colon and Rectal Surgery	2	2
5.	Dermatology	12	12
6.	Family Practice	18[2]	0
7.	Forensic Pathology	0	0
8.	General Practice	6	24
9.	Internal Medicine	131	110
10.	Neurological Surgery	8	6
11.	Neurology	11	9
12.	Obstetrics & Gynecology	64	67
13.	Occupational Medicine	0	0
14.	Ophthalmoloy	41	43
15.	Orthopedic Surgery	50	61
16.	Otolaryngology	34	28
17.	Pathology	44	35
18.	Pediatric Allergy	2	0
19.	Pediatrics	43	47
20.	Pediatric Cardiology	0	4
21.	Physical Medicine & Rehabilitation	0	0
22.	Plastic Surgery	7	7
23.	Preventive Medicine	--[3]	--[3]
24.	Psychiatry	43	56
25.	Public Health	0	0
26.	Radiology	45	49
27.	Radiology, Diagnostic	0	0
28.	Radiology, Therapeutic	0	0
29.	Surgery	115	119
30.	Thoracic Surgery	7	6
31.	Urology	44	27
	Total	767	743

---

[1] Directory of Approved Internships and Residencies 1969-1970 and Directory of Approved Internships and Residencies 1971-1972, AMA. Tabulations include all approved non-federal and VA positions.

[2] Twelve (12) additional family practice residency positions have been approved and will be offered over a three year period.

[3] Approved program at Tulane, number not given.

DISTRIBUTION OF NON-FEDERAL PHYSICIANS* GRADUATED FROM LOUISIANA STATE INSTITUTIONS BY AGE--DECEMBER 31, 1972

Age	Frequency	Percent
Under 25	1	0.0
25 - 29	166	2.3
30 - 34	576	8.1
35 - 39	961	13.6
40 - 44	1011	14.3
45 - 49	1115	15.7
50 - 54	1023	14.4
55 - 59	843	11.9
60 - 64	571	8.1
65 - 69	342	4.8
70 - 74	206	2.9
75 - 79	140	2.0
80 - 84	77	1.1
85 & above	53	0.7
	7085	100.0

* Excludes Interns and Residents

BEST COPY AVAILABLE

DISTRIBUTION OF MEDICAL GRADUATES FROM LOUISIANA STATE INSTITUTIONS WHO ARE CURRENTLY INTERNS AND RESIDENTS BY AGE--DECEMBER 31, 1972

	Current Resident		Current Intern			
Age	Frequency	Per Cent	Frequency	Per Cent	Total	Per Cer
24 & under	1	.1	4	1.8	5	0.5
25 - 29	445	51.4	201	92.2	646	59.6
30 - 34	349	40.3	12	5.5	361	33.3
35 - 39	46	5.3	1	0.5	47	4.3
40 - 44	14	1.6	0	0.0	14	1.3
45 - 49	9	1.0	0	0.0	9	0.8
50 - 54	0	0.0	0	0.0	0	0.0
55 - 59	2	0.2	0	0.0	2	0.2
60 & above	0	0.0	0	0.0	0	0.0
Total	866	100.0	218	100.0	1084	100.0
Percents	79.9		20.1		100.0	

DISTRIBUTION OF PHYSICIANS GRADUATED FROM LOUISIANA STATE INSTITUTION BY CITIZENSHIP - DECEMBER 31, 1972

	Non-Federal Physician	Federal Physician	Interned Residents	Total
U.S. Citizen	6940	627	1069	8636
Immigrants	17	2	3	22
Others	128	4	13	145
Total	7085	633	1085	8803

DISTRIBUTION OF NON FEDERAL PHYSICIANS* IN LOUISIANA BY SECTOR OF EMPLOYMENT AND AGE - DECEMBER 31, 1972

AGE	IRF TRAINEE		PHYSICIANS		TOTAL	
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cer
24 and under	3	0.0	1	.008	0	0.1
25 - 29	387	57.761	133	3.377	4	11.3
30 - 34	234	48.358	427	10.843	520	14.3
35 - 39	30	4.478	582	14.779	661	13.3
40 - 44	08	1.194	604	15.338	612	13.3
45 - 49	06	.896	590	14.982	612	12.9
50 - 54	01	.149	490	12.443	596	10.7
55 - 59	01	.149	410	10.411	491	8.9
60 - 64	00	0.0	269	6.831	269	5.8
64 - 69	00	0.0	178	4.520	178	3.9
70 - 74	00	0.0	100	2.539	100	2.2
74 - 79	00	0.0	71	1.803	71	1.5
80 and above	00	0.0	83	2.108	83	1.8
Totals	670	100.000	3938	100.000	4608	100.0
Per Cents	13.4		79.0			

DISTRIBUTION OF NON-FEDERAL OFFICE-BASED PHYSICIANS IN LOUISIANA BY STATE OF GRADUATION AND YEAR OF GRADUATION--DECEMBER 31, 1972

	OFFICE BASED PRACTICE			
	Louisiana Graduates		Other State Graduates	
Year of Graduation	Frequency	Percent	Frequency	Percent
Up to 1919	21	72.4%	8	27.6%
1920 - 1929	88	74.0%	31	26.0%
1930 - 1939	265	71.0%	108	29.0%
1940 - 1944	337	78.7%	91	21.3%
1945 - 1949	272	72.5%	103	27.5%
1950 - 1954	375	78.0%	106	22.0%
1955 - 1959	410	81.8%	91	18.2%
1960 - 1964	344	74.1%	120	25.9%
1965 - 1969	137	78.7%	37	21.3%
1970 - above	14	66.7%	07	33.3%
Totals	2263		702	

DISTRIBUTION OF NON-FEDERAL PHYSICIANS* GRADUATED FROM LOUISIANA STATE INSTITUTIONS BY MAJOR PROFESSIONAL ACTIVITY, STATE OF PRACTICE AND YEAR OF GRADUATION

	OFFICE BASED PRACTICE				
	Louisiana Graduates		Other State Graduates		
Year of Graduation	Frequency	Percent	Frequency	Percent	
Up to 1919	20	41.7%	28	58.3%	
1920 - 1929	88	34.5%	167	65.5%	
1930 - 1949	265	34.1%	512	65.9%	
1950 - 1954	375	41.7%	524	58.3%	
1955 - 1959	410	43.8%	526	56.2%	
1960 - 1964	344	44.9%	422	55.1%	
1965 - 1969	137	52.1%	126	47.9%	
1970 -	14	51.9%	13	48.1%	
Subtotals	2262	40.1%	3379	59.9%	
Total					5641

* Excludes Interns, Residents

BEST COPY AVAILABLE

STATEWIDE PLANNING FOR PHYSICIAN RESIDENCY PROGRAMS
ROOM 414, 150 RIVERSIDE MALL
BATON ROUGE, LOUISIANA 70801
504-389-6201

Interdepartmental Health
Policy Commission

Louisiana Reg
Medical Pro

COMMITTEE MEMBERS

MURRY A. DIAMOND, M.D.
Touro Infirmary
New Orleans, Louisiana

EDGAR C. GALLOWAY, M.D.
Confederate Memorial Medical Center
Shreveport, Louisiana

EDWARD HARRELL, M.D.
Louisiana State Medical Society
Lafayette, Louisiana

MERRILL O. HINES, M.D.
Ochsner Clinic
New Orleans, Louisiana

GEORGE W. HOBSON, M.D.
Veterans Administration Hospital
New Orleans, Louisiana

CHARLES C. MARY, JR., M.D.
Charity Hospital of Louisiana
New Orleans, Louisiana

W. W. McDOUGALL
Health Education Authority of Louisiana
New Orleans, Louisiana

JOSEPH SABATIER, JR., M.D.
Louisiana Regional Medical Program
New Orleans, Louisiana

ROBERT W. SAPPENFIELD, M.D.
Chairman
New Orleans, Louisiana

H. K. SWEENEY
Louisiana State Department of Hospitals
Baton Rouge, Louisiana

WILLIAM H. STEWART, M.D.
Louisiana State University Medical Center
New Orleans, Louisiana

RAMSON VIDRINE, M.D.
Louisiana State Board of Health
New Orleans, Louisiana

JOHN WALSH, M.D.
Tulane University School of Medicine
New Orleans, Louisiana

RAYMOND C. WILSON
Southern Baptist Hospital
New Orleans, Louisiana

STATEWIDE PLANNING FOR PHYSICIAN RESIDENCIES
(Senior Medical Student Interviews)

1. Medical School ____

2. Age _____

3. Married _____ Never Married _____ Divorced _____ Widowed _____

4. Children _____ Number _____ Age(s) ____________________

5. Your hometown ______________________________________
city state

6. Spouse's hometown ______________________________________
city state

7. Location of pre-med studies ______________________________________
university city state

8. Any member of your family (including first cousins) have an M.D. degree__________

(a) What relation to you

(1)__________ (2)__________ (3)__________ (4)__________

(b) Living or deceased

(1)__________ (2)__________ (3)__________ (4)__________

(c) What specialty

(1)__________ (2)__________ (3)__________ (4)__________

(d) Location of practice______________________________________

(e) Which (if any) of these family members have had an influence on the past, present, or future direction of your own medical careers?

(1)__________ (2)__________ (3)__________ (4)__________

(f) In what way have they influenced you?

9. What do you plan to do?

____(a) Pursue internship training

____(b) Enter directly into residency training

10. Have you decided on a geographic location for your internship or residency training?

____(a) Yes

____(b) No

11. Do you wish to remain in Louisiana for your training?

____(a) Yes

____(b) No

____(c) Undecided

12. Have you selected a "specialty" to pursue in your medical training?

____(a) Yes (If "Yes" go on to next question)

____(b) No

Which specialty?

(c) ________________

13. How did medical school influence your decision regarding general practice in the areas of family practice, pediatrics, and internal medicine?

____(a) Favorable towards general practice

____(b) Unfavorable towards general practice

____(c) No influence

14. What factors influenced or will influence your decision of where you wish to pursue internship (residency) training?

____

____

____

____

15. I am going to read you a list of factors that might have influenced your decision. Please rank these as:

major influence = 1
contributing influence = 2
minor or no influence = 3

____(a) Reputation of specialty programs or director

____(b) Prestige of institution

____(c) Impressed at interview with staff

____(d) Impressed with facilities

____(e) Geographic location

____(f) Recreational facilities (for you or family)

____(g) Cultural resources (for you or family)

____(h) Salary

____(i) Spouse working here

____(j) Job opportunities for wif

____(k) Other economic reasons

____(l) Did not wish to move famil

____(m) Your family or spouse's family living nearby

____(n) Good education for childr

____(o) Change of scenery

16. Have you decided on a geographic location for your future practice?

____(a) Yes

____(b) No

17. Will you remain in Louisiana to conduct your future practice?

____(a) Yes

____(b) No

____(c) Haven't decided

18. If you haven't selected a geographic practice area, have you narrowed your choice to a few areas?

____ Yes (If "Yes" go to next question)

____ No

What states are you considering?

____(a) ____________________

____(b) ____________________

____(c) ____________________

19. What size community most interests you as the type of location for your future practice?

____(a) Metropolitan

____(b) Small city

____(c) Rural area

20. What factors influenced or will influence your choice of location for practice?

____

____

____

____

21. I am going to read you a list of factors that might have influenced your decision. Please rank these as:

major influence = 1
contributing influence = 2
minor or no influence = 3

____(a) Recreational activities

____(b) Planning to join practice of friend or family

____(c) Non-professional family ties (including spouse's family

____(d) Healthy climate to raise family

____(e) Educational opportunities for children

____(f) Attraction of location for spouse

____(g) Desire to remain invol
in academia

____(h) Favorable climate

____(i) Desired community size

____(j) Most favorable geograp
area of location

____(k) Financial opportunitie

____(l) Cultural resources

BEST COPY AVAILABLE

22. Will you use the AMA location service or any other location service? ____Yes ____No

If yes, which one____

23. What type of practice do you plan to enter?

____(a) Solo	____(d) Single disciplinary group
____(b) Partnership	____(e) Multispecialty group
____(c) Association	____(f) Government service

24. What method of payment do you prefer?

____(a) Prepaid	____(b) Fee for service

25. What makes, or would have to be changed, to make Louisiana attractive to you for practice?

26. Additional comments (i.e., suggestion for improvement of residency programs, higher retention of physicians in Louisiana, ideas concerning correction of geographic and specialty maldistribution in physician shortage areas of Louisiana).

27. Any comments?

28. How could we better collect this information?

2/16/73

STATEWIDE PLANNING FOR PHYSICIAN RESIDENCIES
(Internship Interviews)

1. Internship Location____
hospital city

2. Age______

3. Married_____Never Married_____Divorced_____Widowed_____

4. Children_____Number_____Age(s)____________________

5. Your hometown______________________________
city state

6. Spouse's hometown______________________________
city state

7. Location of pre-med studies____
university city state

8. Location of graduating medical school______________________________
university city state

9. Any member of your family (including first cousins) have an M.D. degree______

(a) What relation to you

(1)____________(2)____________(3)____________(4)____________

(b) Living or deceased

(1)____________(2)____________(3)____________(4)____________

(c) What specialty

(1)____________(2)____________(3)____________(4)____________

(d) Location of Practice____

(e) Which (if any) of these family members have had an influence on the past, present, or future direction of your own medical careers

(1)____________(2)____________(3)____________(4)____________

(f) In what way have they influenced you

10 Of the internship training programs to which you applied, what was the ranking of

_____________________________ _________
name of program

11. What factors prompted you to pursue internship training at _____________________
name of institution

(major factor = 1, contributing factor = 2, minor or no factor = 3)

_____(a) Reputation of specialty programs or director
_____(b) Prestige of institution
_____(c) Impressed at interview with staff
_____(d) Impressed with facilities
_____(e) Geographic location
_____(f) Recreational facilities (for you or family)
_____(g) Cultural resources (for you or family)
_____(h) Salary

_____(i) Spouse working here
_____(j) Job opportunities for wife
_____(k) Other economic reasons
_____(l) Did not wish to move family
_____(m) Your family or spouse's fam living nearby
_____(n) Good education for children
_____(o) Change of scenery

Other____

____

____

____

12. What do you feel are the strengths of your internship program (check strengths)

_____(a) Coordination of Departments
_____(b) Homogeneous patient population
_(c) Heterogeneous patient population
_____(d) Variety of clinical experience
_____(e) Large volume of clinical experience
_____(f) Salary
_____(g) Opportunity to excercise independent judgement
_____(h) Excellence of supervision
_____(i) Relationship with teaching staff
_____(j) Contact with high level teaching staff
_____(k) Excellence of fellow residents (opportunity for ideal exchanges)

_____(l) High quality support servic (nurses, etc.)
_____(m) Hours of work
_____(n) Good schedule of nights on-
_____(o) University connection
_____(p) Opportunity for independent research
_____(q) Highly organized educationa program
_____(r) Loosely organized educationa program
_____(s) Living facilities
_____(t) Moonlighting opportunities
_____(u) Potential for eventual pract location

Other____

____

____

____

13 What do you consider to be the weaknesses of your internship program

_____(a) Lack of department coordination
_____(b) Homogeneous patient population
_____(c) Heterogeneous patient population
_____(d) Lack of variety of clinical experience
_____(e) Small volume of clinical experience
_____(f) Salary
_____(g) Not enough opportunity to exercise independent judgement
_____(h) Lack of supervision
_____(i) Poor relationship with teaching staff
_____(j) Lack of contact with high level teaching staff
_____(k) Lack of excellence in fellow residents
_____(l) Low quality support services (nurses, etc.)
_____(m) Hours of work
_____(n) Poor schedule of nights on-call
_____(o) Excessive scut work
_____(p) Compulsory scut-level resea
_____(q) Too many nights on-call
_____(r) Highly organized educationa programs
_____(s) Loosely organized education programs
_____(t) Living facilities not avail
_____(u) No moonlighting opportuniti
_____(v) Lack of potential for event practice location

Other____

14. (a) Have you decided the geographic location of your practice (yes)_____ (no)_____

(b) If yes, where_____________________
state

(c) Is this a_____large metropolitan area_____small city or town_____rural area

(d) If you haven't selected a specific practice area, have you narrowed the choice down to a few areas (yes)_____ (no)_____

(e) If yes, how many and in what states

(1)	____________ state	____________ metropolitan	____________ small city	____________ rural
(2)	____________ state	____________ metropolitan	____________ small city	____________ rural
(3)	____________ state	____________ metropolitan	____________ small city	____________ rural
(4)	____________ state	____________ metropolitan	____________ small city	____________ rural

1 What factors influenced or will influence your choice of location for practice (major factor = 1, contributing factor = 2, minor factor or of no importance = 3)

_____(a) Recreational activities

_____(b) Planning to join practice of friend or family

_____(c) Non-professional family ties (including spouse's family)

_____(d) Healthy climate to raise family

_____(e) Educational opportunities for children

_____(f) Attraction of location for spouse

_____(g) Desire to remain involv in academia

_____(h) Favorable climate

_____(i) Desired community size

_____(j) Most favorable geographi area of location

_____(k) Financial opportunities

_____(l) Cultural resources

Other____

____

____

____

Did you use the AMA location service or any other location service (yes)_____(no)_____

If yes, which one___________________________________

16. What type of practice do you plan to enter

(a)_____solo

_____partnership

_____association

_____single disciplinary group

_____multispecialty group

_____government service

(b)_____ prepaid

_____fee for service

17. What makes, or would have to be changed, to make Louisiana attractive to you for practi

18. Additional comments (i.e. suggestion for improvement of residency programs, higher retention of physicians in Louisiana, ideas concerning correction of geographic and specialty maldistribution in physician shortage areas of Louisiana)

19. **Any comments**

20. **How could we better collect this information**

MM:e
[illegible]

STATEWIDE PLANNING FOR PHYSICIAN RESIDENCIES
(First Year Resident Interviews)

1. Residency Location ____
hospital city

2. Specialty (or subspecialty)____________________________________

3. Age______

4. Married_____Never Married_____Divorced_____Widowed_____

5. Children_____Number_____Age(s)__________________

6. Your hometown____
city state

7. Spouse's hometown____
city state

8. Location of pre-med studies____________________________________
university city state

9. Location of graduating medical school____________________________
university city state

10. Location of internship (if applicable)___________________________
hospital city state

1 Any member of your family (including first cousins) have an M.D. degree____________

(a) What relation to you

(1)______________(2)______________(3)______________(4)______________

(b) Living or deceased

(1)______________(2)______________(3)______________(4)______________

(c) What specialty

(1)______________(2)______________(3)______________(4)______________

(d) Location of Practice____

(e) Which (if any) of these family members have had an influence on the past, present, or future direction of your own medical careers

(1)______________(2)______________(3)______________(4)______________

(f) In what way have they influenced you

12. To how many programs did you apply for residency training__________

How many of these programs accepted you__________

13. What factors prompted you to pursue residency training at______________________

name of institution

(major factor = 1, contributing factor = 2, minor or no factor = 3)

_____(a) Reputation of specialty programs or director

_____(b) Prestige of institution

_____(c) Impressed at interview with staff

_____(d) Impressed with facilities

_____(e) Geographic location

_____(f) Recreational facilities (for you or family)

_____(g) Cultural resources (for you or family)

_____(h) Salary

_____(i) Spouse working here

_____(j) Job opportunities for wife

_____(k) Other economic reasons

_____(l) Did not wish to move family

_____(m) Your family or spouse's fami
living nearby

_____(n) Good education for children

_____(o) Change of scenery

Other____

____

____

____

14. What do you feel are the strengths of your residency program (check strengths)

_____(a) Coordination of Departments

_____(b) Homogeneous patient population

_____(c) Heterogeneous patient population

_____(d) Variety of clinical experience

_____(e) Large volume of clinical experience

_____(f) Salary

_____(g) Opportunity to excercise independent judgement

_____(h) Excellence of supervision

_____(i) Relationship with teaching staff

_____(j) Contact with high level teaching staff

_____(k) Excellence of fellow residents (opportunity for ideal exchanges)

_____(l) High quality support service
(nurses, etc.)

_____(m) Hours of work

_____(n) Good schedule of nights on-c

_____(o) University connection

_____(p) Opportunity for independent
research

_____(q) Highly organized educational
program

_____(r) Loosely organized educationa
program

_____(s) Living facilities

_____(t) Moonlighting opportunities

_____(u) Potential for eventual pract
location

Other____

____

____

____

15. What do you consider to be the weaknesses of your residency program

_____(a) Lack of department coordination
_____(b) Homogeneous patient population
_____(c) Heterogeneous patient population
_____(d) Lack of variety of clinical experience
_____(e) Small volume of clinical experience
_____(f) Salary
_____(g) Not enough opportunity to exercise independent judgement
_____(h) Lack of supervision
_____(i) Poor relationship with teaching staff
_____(j) Lack of contact with high level teaching staff
_____(k) Lack of excellence in fellow residents
_____(l) Low quality support services (nurses, etc.)
_____(m) Hours of work
_____(n) Poor schedule of nights on-call
_____(o) Excessive scut work
_____(p) Compulsory scut-level resear
_____(q) Too many nights on-call
_____(r) Highly organized educational programs
_____(s) Loosely organized educationa programs
_____(t) Living facilities not availa
_____(u) No moonlighting opportunitie
_____(v) Lack of potential for eventu practice location

Other____

____

____

____

16. (a) Have you decided the geographic location of your practice (yes)_____(no)_____

(b) If yes, where______________________
state

(c) Is this a_____large metropolitan area_____small city or town_____rural area

(d) If you haven't selected a specific practice area, have you narrowed the choice down to a few areas (yes)_____(no)_____

(e) If yes, how many and in what states

(1)______________ ______________ ______________ ______________
state metropolitan small city rural

(2)______________ ______________ ______________ ______________
state metropolitan small city rural

(3)______________ ______________ ______________ ______________
state metropolitan small city rural

(4)______________ ______________ ______________ ______________
state metropolitan small city rural

17. What factors influenced or will influence your choice of location for practice (major factor = 1, contributing factor = 2, minor factor or of no importance = 3)

_____(a) Recreational activities

_____(b) Planning to join practice of friend or family

_____(c) Non-professional family ties (including spouse's family)

_____(d) Healthy climate to raise family

_____(e) Educational opportunities for children

_____(f) Attraction of location for spouse

_____(g) Desire to remain involved in academia

_____(h) Favorable climate

_____(i) Desired community size

_____(j) Most favorable geographical area of location

_____(k) Financial opportunities

_____(l) Cultural resources

Other____

____

____

____

Did you use the AMA location service or any other location service (yes)_____(no)_____

If yes, which one____

18. What type of practice do you plan to enter

(a)_____solo

_____partnership

_____association

_____single disciplinary group

_____multispecialty group

_____government service

(b)_____ prepaid

_____fee for service

19. What makes, or would have to be changed, to make Louisiana attractive to you for practice

20. Additional comments (i.e. suggestion for improvement of residency programs, higher retention of physicians in Louisiana, ideas concerning correction of geographic and specialty maldistribution in physician shortage areas of Louisiana)

21. Any comments

22. How could we better collect this information

MM:e
November 7, 1972

STATEWIDE PLANNING FOR PHYSICIAN RESIDENCIES

(Final Year Resident Interviews)

1. Residency Location ____
hospital city

2. Specialty (or subspecialty)______________________________________

3. Age______

4. Married_____Never Married_____Divorced_____Widowed_____

5. Children_____Number_____Age(s)____________________

6. Your hometown____
city state

7. Spouse's hometown____
city state

8. Location of pre-med studies______________________________________
university city state

9. Location of graduating medical school______________________________
university city state

0. Location of internship (if applicable)______________________________
hospital city state

1. Any member of your family (including first cousins) have an M.D. degree____________

(a) What relation to you

(1)______________(2)______________(3)______________(4)______________

(b) Living or deceased

(1)______________(2)______________(3)______________(4)______________

(c) What specialty

(1)______________(2)______________(3)______________(4)______________

(d) Location of Practice____

(d) Which (if any) of these family members have had an influence on the past, present, or future direction of your own medical careers

(1)______________(2)______________(3)______________(4)______________

(f) In what way have they influenced you

Was ______________________________ your first choice as a training program? _____
(name of training institution)

If not, how did it rank among programs to which you applied? ____________________

14. What factors influenced your decision to pursue residency training at _____________
(institution)

____

____

____

15. I am going to read you a list of factors that might have influenced your decision. Please rank these as:

major influence = 1
contributing influence = 2
minor or no influence = 3

_____(a) Reputation of specialty programs or director
_____(b) Prestige of institution
_____(c) Impressed at interview with staff
_____(d) Impressed with facilities
_____(e) Geographic location
_____(f) Recreational facilities (for you or family)
_____(g) Cultural resources (for you or family)
_____(h) Salary
_____(i) Spouse working here
_____(j) Job opportunities for wife
_____(k) Other economic reasons
_____(l) Did not wish to move family
_____(m) Your family or spouse's family living nearby
_____(n) Good education for children
_____(o) Change of scenery

Other____

____

____

____

16. What do you feel are the strengths of your residency program?

____

____

____

____

17. I am going to read you another list. Please respond to the factors you feel represent the strengths of your residency training.

_____(a) Coordination of Departments
_____(b) Homogeneous patient population
_____(c) Heterogeneous patient population
_____(d) Variety of clinical experience
_____(e) Large volume of clinical experience
_____(f) Salary
_____(l) High quality support services (nurses, etc.)
_____(m) Hours of work
_____(n) Good schedule of nights on-call
_____(o) University connection
_____(p) Opportunity for independent research

17. (Cont'd.)

_____(g) Opportunity to exercise independent judgement
_____(h) Excellence of supervision
_____(i) Relationship with teaching staff
_____(j) Contact with high level teaching staff
_____(k) Excellence of fellow residents (opportunity for ideal exchanges)
_____(q) Highly organized educational program
_____(r) Loosely organized educational program
_____(s) Living facilities
_____(t) Moonlighting opportunities
_____(u) Potential for eventual practice location

Other ____

____

____

____

8. What do you consider to be the weaknesses of your residency program?

____

____

____

____

9. I am going to read you a list similar to the previous one. Please respond to the factors you feel represent the weaknesses of your residency program

_____(a) Lack of department coordination
_____(b) Homogeneous patient population
_____(c) Heterogeneous patient population
_____(d) Lack of variety of clinical experience
_____(e) Small volume of clinical experience
_____(f) Salary
_____(g) Not enough opportunity to exercise independent judgment
_____(h) Lack of supervision
_____(i) Poor relationship with teaching staff
_____(j) Lack of contact with high level teaching staff
_____(k) Lack of excellence in fellow residents
_____(l) Low quality support services (nurses, etc.)
_____(m) Hours of work
_____(n) Poor schedule of nights on call
_____(o) Excessive scut work
_____(p) Compulsory scut-level research
_____(q) Too many nights on call
_____(r) Highly organized educational programs
_____(s) Loosely organized educationa programs
_____(t) Living facilities not availabl
_____(u) No moonlighting opportunities
_____(v) Lack of potential for eventual practice location.

Other ____

____

____

____

20. Have you decided on a geographic location for your future practice?

_____(a) Yes

_____(b) No

21. Will you remain in Louisiana to conduct your future practice?

_____(a) Yes

_____(b) No

_____(c) Haven't decided

22. What size community most interests you as the type of location for your future practice?

_____(a) Metropolitan

_____(b) Small city

_____(c) Rural area

23. If you haven't selected a geographic practice area, have you narrowed your choice to a few areas?

_____Yes (If "Yes" go to next question)

_____No

What states are you considering?

______________________ ______________________ ______________________

24. If you have not selected a geographic practice area, is this due to some other obligations you have such as military service? _______Yes _______No

If "yes" what is that obligation?

____

____

____

____

25. What factors influenced or will influence your choice of location for practice?

____

____

____

____

26. I am going to read you a list of factors that might have influenced your decision. Please rank these as:

major influence = 1
contributing influence = 2
minor or no influence = 3

_____(a) Recreational activities

_____(b) Planning to join practice of friend or family

_____(c) Non-professional family ties (including spouse's family)

_____(g) Desire to remain involved in academia

_____(h) Favorable climate

_____(i) Desired community size

(cont'd.)

_____(d) Healthy climate to raise family

_____(e) Educational opportunities for children

_____(f) Attraction of location for spouse

_____(j) Most favorable geographical area of location

_____(k) Financial opportunities

_____(l) Cultural resources

27. Did you use the AMA location service or any other location service (yes) ____(no)_____
If yes, which one____

28. Was your choice of specialty a major influence in your selection of a geographic practice location?

29. What type of practice do you plan to enter?

_____(a) Solo

_____(b) Partnership

_____(c) Association

_____(d) Single disciplinary group

_____(e) Multispecialty group

_____(f) Government service

Did your choice of specialty influence this decision? _____Yes _____ No

30. What method of payment do you prefer?

_____(a) Prepaid

_____(b) Fee for service

31. What makes, or would have to be changed, to make Louisiana attractive to you for practice?

32. Additional comments (i.e., suggestions for improvement of residency programs, higher retention of physicians in Louisiana, ideas concerning correction of geographic and specialty maldistribution in physician shortage areas of Louisiana).

33. Any comments?

34. How could we better collect this information?

4/13/73